

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>C Number:</b>	C88031B
<b>Lock Date:</b>	11/09/1999
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	12/14/2000

Experiment Number: 88031-05

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Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0%

DISP: Terminal Sacrifice

HISTO: 9900861

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Mammary Gland

OBSERVATIONS

* Adrenal Cortex		Hyperplasia Hypertrophy Pheochromocytoma Malignant Pheochromocytoma Malignant	Mild Mild Metastatic (Adrenal Medulla)
* Adrenal Medulla [ Pheochromocytoma Malignant TGLS = 3-12 ]		Pheochromocytoma Malignant	Metastatic (Adrenal Medulla)
* Bone Marrow		Cardiomyopathy	Mild
* Heart		Nephropathy	Mild
* Kidney Note: TGL 3, "mass, 37 x 28 x 25 mm, red" noted at necropsy, actually involved adrenal gland.		Clear Cell Focus	
* Liver Bile Duct		Hyperplasia Inflammation Inflammation	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Minimal
Note: TGL 2, "deformity" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular Pheochromocytoma Malignant	Histiocyte, Minimal Metastatic (Adrenal Medulla)
* Prostate		Hyperplasia	Marked
* Testes Interstit Cell		Adenoma Atrophy	Marked
[ Adenoma TGLS = 1-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

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**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

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**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 1

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900861

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Atrophy TGLS = 1-8 ]

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
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**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900862

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Degeneration	Cystic, Mild
		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
		Stromal Nephroma	
[ Stromal Nephroma TGLS = 6-6 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
Note: TGL 3, "deformity" noted at necropsy, was not apparent microscopically.			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
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**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
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**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900862
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Congestion TGLS = 5-5 ]		Congestion	Moderate
* Stom Gland Note: TGL 7, "lesion, 4 x 3 mm" noted at trim, was not apparent microscopically.			
* Testes [ Adenoma TGLS = 1-8 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 653

DOSE: 0.0%

DISP: Moribund Sacrifice

HISTO: 9900863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                   | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Mammary Gland             |
| * Parathyroid Gland      | * Pituitary Gland          | * Preputial Gland         | * Prostate                  |
| * Salivary Glands        | * Skin                     | * Thymus                  | * Trachea                   |
| * Urinary Bladder        |                            |                           |                             |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                                        |                |                                                              |                             |
|----------------------------------------|----------------|--------------------------------------------------------------|-----------------------------|
| * Adrenal Cortex                       |                | Leukemia Mononuclear<br>Necrosis                             | Mild                        |
| * Adrenal Medulla                      |                | Hyperplasia<br>Leukemia Mononuclear                          | Moderate                    |
| * Bone Marrow                          |                | Leukemia Mononuclear                                         |                             |
| * Heart                                |                | Cardiomyopathy<br>Leukemia Mononuclear                       | Moderate                    |
| * Kidney                               |                | Leukemia Mononuclear                                         |                             |
| [ Leukemia Mononuclear TGLS = 4-6 ]    |                |                                                              |                             |
| * Liver                                | Bile Duct      | Hyperplasia<br>Leukemia Mononuclear                          | Mild                        |
| [ Leukemia Mononuclear TGLS = 3-5 ]    | Centrilobular  | Necrosis                                                     | Mild                        |
| * Lung                                 | Alveolar Epith | Hyperplasia<br>Infiltration Cellular<br>Leukemia Mononuclear | Mild<br>Histiocyte, Minimal |
| Lymph Node                             | Mediastinal    | Metaplasia<br>Leukemia Mononuclear                           | Squamous, Minimal           |
| [ Leukemia Mononuclear TGLS = 5-3 ]    |                |                                                              |                             |
| * Lymph Node, Mesenteric               |                | Leukemia Mononuclear                                         |                             |
| [ Leukemia Mononuclear TGLS = 6-7+13 ] |                |                                                              |                             |

\* PROTOCOL REQUIRED TISSUE

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**Route:** DOSED WATER  
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**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 653 <b>HISTO:</b> 9900863
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Mild
		Leukemia Mononuclear	
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-12 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

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**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900864

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Ganglioneuroma	
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 4-15 ]			
* Spleen		Hyperplasia	Lymphoid, Focal, Mild

\* PROTOCOL REQUIRED TISSUE



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**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900864
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 2-13 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900865

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Islets, Pancreatic		Adenoma	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-5+17 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
		Infiltration Cellular	Histiocyte, Minimal
[ Hyperplasia TGLS = 3-12 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Galactoceles	Mild
[ Galactoceles TGLS = 7-16 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
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**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900865
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 4-9 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Chronic Active, Mild
* Spleen [ Leukemia Mononuclear TGLS = 2,6-13+5 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
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**Date Report Requested:** 10/21/2014  
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**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 698 <b>HISTO:</b> 9900866
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Moderate
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Mammary Gland			
Note: TGL 1, "mass, 90 x 70 x 50 mm, tan" noted at necropsy, was actually skin mass.			
* Pancreas		Atrophy	Minimal
		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-12 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Interstit Cell	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 2-13 ]			

**PRIMARY CAUSE OF DEATH** - Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
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**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
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**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900867

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Clear Cell Focus TGLS = 3-12 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 2-14 ]			
* Prostate		Hyperplasia	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

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**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900868

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
Note: TGL 4, "left atrium, enlarged, 3x" noted at necropsy, was not apparent microscopically.			
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
[ Basophilic Focus TGLS = 3-13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Mild
		Leukemia Mononuclear	
[ Inflammation TGLS = 5-12 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Minimal
		Hyperplasia	Mild
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Prostate		Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

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**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900868
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Salivary Glands		Basophilic Focus	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 582 <b>HISTO:</b> 9900869
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Liver	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Stomach, Forestomach	* Testes	

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**MISSING**

* Lymph Node, Mandibular	* Skin
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Prostate
* Seminal Vesicle	* Spleen	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**INSUFFICIENT TISSUE**

\* Thymus

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**OBSERVATIONS**

Eye [ Cataract TGLS = 1-12 ]		Cataract	Moderate
* Liver Note: TGL 3, "focus, 1 mm dia, diffuse, white" noted at necropsy, was not seen at trim.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	

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**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 10

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 565

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900870

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
Note: TGL 5,"lesion, 1 cm x .7 cm, dark", noted at trim, was clotted blood in right atrium.			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
		Regeneration	Mild
		[ Leukemia Mononuclear TGLS = 2-5 ]	
		[ Regeneration TGLS = 3-12 ]	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 10	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 565 <b>HISTO:</b> 9900870
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 4-7 ]			
* Nose	Olfactory Epi	Atrophy Inflammation	Minimal Suppurative, Minimal
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Fibrosis Leukemia Mononuclear	Minimal
[ Leukemia Mononuclear TGLS = 1-13 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 11

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 568

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900871

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
		Cardiomyopathy	Mild
* Intestine Large, Colon		Leukemia Mononuclear	
* Kidney		Parasite Metazoan	
		Leukemia Mononuclear	
* Liver	Bile Duct	Nephropathy	Mild
		Hyperplasia	Mild
	Centrilobular	Leukemia Mononuclear	
		Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 5-5 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Preputial Gland		Carcinoma	
	[ Carcinoma TGLS = 1-13 ]		
* Spleen		Hemorrhage	Mild
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:54

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 11

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 568

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900871

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hemorrhage TGLS = 3-12 ]

[ Leukemia Mononuclear TGLS = 2-12 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 4-8 ]

\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 376

DOSE: 0.0%

DISP: Moribund Sacrifice

HISTO: 9900872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Int Lg Cecum			
Note: TGL 4, "dilatation, 10x" noted at necropsy, was not apparent microscopically.			
* Kidney		Nephropathy	Minimal
* Liver		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lym Node Mesen			
Note: TGL 3, "enlarged, 35 x 10 x 6 mm, mottled" noted at necropsy, was actually mesenteric fat.			
Mesentery	Fat	Inflammation	Moderate
	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Nose		Inflammation	Suppurative, Minimal
* Testes			
Note: TGL 1, "discoloration, mottled" noted at necropsy, was not apparent microscopically.			
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 2-12 ]			

PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 13

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900873

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Marked
Blood Vessel		Inflammation	Granulomatous, Minimal
* Heart		Cardiomyopathy	Mild
* Int Sm Jejunum			
Note: TGL 4,"Peyer's patch, enlarged, 2x" noted at necropsy, was within normal limits microscopically.			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Moderate
		Carcinoma	
[ Carcinoma TGLS = 3-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin	Sebaceous GI	Adenoma	
[ Adenoma TGLS = 1-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 13

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900873

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 2-8 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 697

DOSE: 0.0%

DISP: Natural Death

HISTO: 9900874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                           |                             |                      |
|--------------------------|---------------------------|-----------------------------|----------------------|
| * Bone                   | * Brain                   | * Epididymis                | * Esophagus          |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Islets, Pancreatic |
| * Mammary Gland          | * Nose                    | * Parathyroid Gland         | * Pituitary Gland    |
| * Preputial Gland        | * Prostate                | * Salivary Glands           | * Seminal Vesicle    |
| * Skin                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Thyroid Gland      |
| * Trachea                | * Urinary Bladder         |                             |                      |

MISSING

- \* Thymus

AUTO PRECLUDES DIAG.

- |                          |                            |
|--------------------------|----------------------------|
| * Intestine Small, Ileum | * Intestine Small, Jejunum |
|--------------------------|----------------------------|

OBSERVATIONS

- |                                                                                         |                                     |          |
|-----------------------------------------------------------------------------------------|-------------------------------------|----------|
| * Adrenal Cortex                                                                        | Leukemia Mononuclear                |          |
| * Adrenal Medulla                                                                       | Hyperplasia                         | Moderate |
|                                                                                         | Leukemia Mononuclear                |          |
|                                                                                         | Pheochromocytoma Benign             |          |
| * Bone Marrow                                                                           | Leukemia Mononuclear                |          |
| * Heart                                                                                 | Cardiomyopathy                      | Mild     |
|                                                                                         | Schwannoma Benign                   |          |
| Note: TGL 6, "enlarged, 3x, white" noted at necropsy, was not apparent microscopically. |                                     |          |
| * Intestine Large, Cecum                                                                | Leukemia Mononuclear                |          |
|                                                                                         | [ Leukemia Mononuclear TGLS = 7-7 ] |          |
| * Kidney                                                                                | Infarct                             | Moderate |
|                                                                                         | Leukemia Mononuclear                |          |
|                                                                                         | Nephropathy                         | Mild     |
|                                                                                         | [ Infarct TGLS = 5-13 ]             |          |
| * Liver                                                                                 | Basophilic Focus                    |          |
|                                                                                         | Bile Duct                           | Moderate |
|                                                                                         | Hyperplasia                         |          |
|                                                                                         | Leukemia Mononuclear                |          |
|                                                                                         | Centrilobular                       |          |
|                                                                                         | Necrosis                            | Minimal  |
|                                                                                         | [ Hyperplasia TGLS = 4-5 ]          |          |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 14	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 697 <b>HISTO:</b> 9900874
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
Lymph Node	Bronchial	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear	

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 511

DOSE: 0.0%

DISP: Natural Death

HISTO: 9900875

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                   |                     |                        |             |
|-------------------|---------------------|------------------------|-------------|
| * Bone            | * Brain             | * Epididymis           | * Esophagus |
| * Mammary Gland   | * Parathyroid Gland | * Pituitary Gland      | * Prostate  |
| * Salivary Glands | * Seminal Vesicle   | * Stomach, Forestomach | * Thymus    |
| * Urinary Bladder |                     |                        |             |

MISSING

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Bone Marrow               | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Lymph Node, Mesenteric    | * Pancreas               | * Spleen                   | * Stomach, Glandular      |
| * Thyroid Gland             | * Trachea                |                            |                           |

OBSERVATIONS

- |                                           |               |                            |                              |
|-------------------------------------------|---------------|----------------------------|------------------------------|
| * Adrenal Cortex                          |               | Sarcoma                    | Metastatic (Skin)            |
| * Adrenal Medulla                         |               | Pheochromocytoma Malignant |                              |
| [ Pheochromocytoma Malignant TGLS = 6-6 ] |               |                            |                              |
| * Heart                                   |               | Cardiomyopathy             | Mild                         |
|                                           |               | Sarcoma                    | Metastatic (Skin)            |
| [ Sarcoma TGLS = 8-14 ]                   |               |                            |                              |
| * Kidney                                  |               | Infarct                    | Marked                       |
|                                           |               | Sarcoma                    | Metastatic (Skin)            |
| [ Infarct TGLS = 5-6 ]                    |               |                            |                              |
| [ Sarcoma TGLS = 10-17 ]                  |               |                            |                              |
| * Liver                                   | Centrilobular | Hepatodiaphragmatic Nodule |                              |
|                                           |               | Necrosis                   | Moderate                     |
| [ Hepatodiaphragmatic Nodule TGLS = 4-5 ] |               |                            |                              |
| * Lung                                    |               | Carcinoma                  | Metastatic (Preputial Gland) |
|                                           |               | Sarcoma                    | Metastatic (Skin)            |
| [ Carcinoma TGLS = 9-3+4+12 ]             |               |                            |                              |
| [ Sarcoma TGLS = 9-3+4+12 ]               |               |                            |                              |
| Mesentery                                 | Fat           | Necrosis                   | Mild                         |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 15	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 511 <b>HISTO:</b> 9900875
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 3-13 ]			
* Nose		Inflammation	Suppurative, Mild
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-20 ]			
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-15+16+19+20 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

---

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 569

DOSE: 0.0%

DISP: Natural Death

HISTO: 9900876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Pituitary Gland	* Seminal Vesicle	* Spleen	* Trachea

OBSERVATIONS

* Epididymis [ Mesothelioma Malignant TGLS = 4-8+15 ]		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia Inflammation	Minimal Histiocytic, Focal, Mild
* Mammary Gland Note: TGL 1, "mass, 60 x 50 x 25 mm" noted at necropsy, was actually subcutaneous skin mass, not mammary.			
Mesentery [ Necrosis TGLS = 5-12 ]	Fat	Necrosis	Mild
* Pancreas		Atrophy	Mild
* Prostate		Inflammation	Chronic Active, Moderate
* Skin [ Fibroma TGLS = 1-13+14 ]	Subcut Tiss	Fibroma	
* Testes [ Adenoma TGLS = 3-8 ] [ Mesothelioma Malignant TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant	
* Thyroid Gland	C Cell	Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 16

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 569

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900876

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 6-2 ]

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PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 17

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900877

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Trachea	* Urinary Bladder	

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
		Necrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
	Centrilobular	Leukemia Mononuclear	
		Necrosis	Moderate
	[ Leukemia Mononuclear TGLS = 5-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-2 ]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-8 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 17	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 564 <b>HISTO:</b> 9900877
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 4-13 ]			
* Nose	Olfactory Epi	Atrophy Inflammation	Mild Suppurative, Moderate
	Olfactory Epi	Metaplasia	Moderate
* Spleen		Fibrosis Leukemia Mononuclear	Minimal
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Stomach, Glandular		Necrosis	Mild
[ Necrosis TGLS = 6-9+12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 7-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 18

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 679

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900878

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Rectum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea		

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Thyroid Gland	* Urinary Bladder	

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Preputial Gland		Adenoma	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 19

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 653

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900879

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Diffuse, Mild
		Ulcer	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: 0.0%

DISP: Terminal Sacrifice

HISTO: 9900880

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                   | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Mammary Gland             |
| * Nose                   | * Pancreas                 | * Parathyroid Gland       | * Preputial Gland           |
| * Salivary Glands        | * Seminal Vesicle          | * Stomach, Forestomach    | * Stomach, Glandular        |
| * Thymus                 | * Trachea                  | * Urinary Bladder         |                             |

OBSERVATIONS

- |                          |                                                                                             |                            |                     |
|--------------------------|---------------------------------------------------------------------------------------------|----------------------------|---------------------|
| * Adrenal Cortex         |                                                                                             | Hyperplasia                | Mild                |
| * Adrenal Medulla        |                                                                                             | Leukemia Mononuclear       |                     |
|                          |                                                                                             | Leukemia Mononuclear       |                     |
|                          |                                                                                             | Pheochromocytoma Malignant |                     |
|                          | [ Pheochromocytoma Malignant TGLS = 6-6 ]                                                   |                            |                     |
| * Bone Marrow            |                                                                                             | Leukemia Mononuclear       |                     |
| * Heart                  |                                                                                             | Cardiomyopathy             | Mild                |
| * Kidney                 | Renal Tubule                                                                                | Adenoma                    |                     |
|                          |                                                                                             | Leukemia Mononuclear       |                     |
|                          |                                                                                             | Nephropathy                | Moderate            |
| * Liver                  |                                                                                             | Basophilic Focus           |                     |
|                          |                                                                                             | Clear Cell Focus           |                     |
|                          |                                                                                             | Leukemia Mononuclear       |                     |
|                          | Note: TGL 4, "deformity, 8 x 6 x 3 mm" noted at necropsy, was not apparent microscopically. |                            |                     |
|                          | [ Leukemia Mononuclear TGLS = 3-5 ]                                                         |                            |                     |
| * Lung                   |                                                                                             | Infiltration Cellular      | Histiocyte, Minimal |
|                          |                                                                                             | Leukemia Mononuclear       |                     |
| Lymph Node               | Mediastinal                                                                                 | Leukemia Mononuclear       |                     |
| * Lymph Node, Mandibular |                                                                                             | Leukemia Mononuclear       |                     |
| * Lymph Node, Mesenteric |                                                                                             | Leukemia Mononuclear       |                     |
| * Mammary Gland          |                                                                                             |                            |                     |
|                          | Note: TGL 1, "mass, 35 x 25 x 15 mm" noted at necropsy, actually involved subcutis (skin).  |                            |                     |
| * Pituitary Gland        | Pars Distalis                                                                               | Adenoma                    |                     |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 20	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900880
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 7-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 21

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900881

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Parathyroid Gland		Adenoma	
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 2-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
Tooth		Inflammation	Chronic Active, Moderate

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 22

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900882

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Ectasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Hyperplasia	Minimal
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 636

DOSE: 0.0%

DISP: Natural Death

HISTO: 9900883

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Epididymis
- \* Lymph Node, Mesenteric
- \* Pituitary Gland
- \* Skin
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Mammary Gland
- \* Preputial Gland
- \* Stomach, Forestomach
- \* Trachea

- \* Bone Marrow
- \* Intestine Large, Colon
- \* Nose
- \* Prostate
- \* Stomach, Glandular

- \* Brain
- \* Intestine Small, Duodenum
- \* Parathyroid Gland
- \* Salivary Glands
- \* Thymus

MISSING

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- \* Intestine Large, Cecum
- \* Islets, Pancreatic

- \* Intestine Large, Rectum
- \* Pancreas

- \* Intestine Small, Ileum
- \* Seminal Vesicle

- \* Intestine Small, Jejunum
- \* Spleen

OBSERVATIONS

- \* Adrenal Medulla
- \* Heart
- \* Kidney
- \* Liver

- \* Lung
- \* Testes  
[ Adenoma TGLS = 1,2-8 ]
- \* Urinary Bladder  
[ Sarcoma TGLS = 3-12+13 ]

Bilateral, Interstit Cell

- Hyperplasia
- Cardiomyopathy
- Nephropathy
- Inflammation
- Inflammation
- Infiltration Cellular
- Adenoma

Sarcoma

- Minimal
- Mild
- Mild
- Histiocytic, Focal, Minimal
- Granulomatous, Focal, Minimal
- Histiocyte, Minimal

PRIMARY CAUSE OF DEATH

- Urinary Bladder Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 24	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 673 <b>HISTO:</b> 9900884
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Heart	* Lung	* Preputial Gland	* Salivary Glands
* Stomach, Forestomach			

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**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Seminal Vesicle	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

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**OBSERVATIONS**

\* Kidney  
Note: TGL 2, "nodule, 3 x 3 x 1 mm, 1 x 1 x 1 mm, tan (2)" noted at necropsy, was not apparent microscopically due to post mortem autolysis.

* Liver	Bile Duct Centrilobular	Hyperplasia Necrosis Regeneration	Moderate Mild Mild
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[ Regeneration TGLS = 4-14 ]

* Skin		Cyst	Moderate
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[ Cyst TGLS = 5-12 ]

\* Spleen  
Note: TGL 3, "enlarged, 70 x 10 x 5 mm, dark" noted at necropsy, was most likely due to leukemia, but post mortem autolysis precluded microscopic diagnosis.

* Testes	Interstit Cell	Adenoma	
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[ Adenoma TGLS = 1-8 ]

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 25

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900885

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 4-6 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
Note: TGL 3, "deformity, 7 x 5 x 3 mm" noted at necropsy, was variation in normal lobar morphology.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 26

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 718

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900886

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Salivary Glands	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
Note: TGL 5, "deformity, 3 x 3 x 1 mm" noted at necropsy, was not apparent microscopically.			
Note: TGL 7, "focus, 1 x 1 mm, two, tan" noted at necropsy, was not apparent microscopically.			
[ Basophilic Focus TGLS = 4,6-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary GI			
Note: TGL 8 actually involved subcutaneous tissue (skin), not mammary gland.			
* Pancreas		Atrophy	Mild
		Hyperplasia	Mild
* Skin		Inflammation	Chronic Active, Mild
	Subcut Tiss	Sarcoma	
[ Inflammation TGLS = 1-15 ]			
[ Sarcoma TGLS = 8-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 26	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 718 <b>HISTO:</b> 9900886
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Atrophy TGLS = 3-5 ]		Atrophy	Mild
* Testes [ Adenoma TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma	

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**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 27

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900887

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 6-13 ]			
* Pancreas		Atrophy	Mild
* Pituitary Gland		Leukemia Mononuclear	
* Prostate		Hyperplasia	Minimal
* Spleen		Fibrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:54

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 27

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 667

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900887

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 1-12 ]

\* Stomach, Glandular

\* Testes

[ Adenoma TGLS = 3-8 ]

\* Thymus

Leukemia Mononuclear

Necrosis

Adenoma

Leukemia Mononuclear

Minimal

---

**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 28

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 697

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900888

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	Lymph Node	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus Inflammation	Histiocytic, Focal, Minimal
Note: TGL 4, "nodule, 5 x 5 x 3 mm" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
Note: TGL 2, "mediastinal, enlarged, 4x" noted at necropsy, was within normal limits microscopically.			
* Mammary GI			
Note: TGL 1 actually involved subcutaneous tissue, not mammary gland.			
* Pancreas		Mixed Tumor Benign	
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-12 ]			
* Spleen			
Note: TGL 3, "nodules, 3-4 mm in diameter, 3" noted at necropsy, were not apparent microscopically.			
* Stomach, Forestomach		Hyperplasia Ulcer	Squamous, Diffuse, Mild Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:54

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 28

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 697

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900888

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 29

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 717

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900889

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Islets, Pancreatic	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Skin	* Trachea

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Seminal Vesicle	* Thyroid Gland

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Malignant	
	[ Pheochromocytoma Malignant TGLS = 4-6 ]		
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Fatty Change	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 5-5 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-13 ]		
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 2-14 ]		
* Pancreas		Atrophy	Mild
* Pituitary Gland		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 29	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 717
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9900889

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Leukemia Mononuclear	
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 8-12 ]		
	[ Leukemia Mononuclear TGLS = 3-5 ]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
		Necrosis	Minimal
	[ Necrosis TGLS = 9-9 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thymus		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-2 ]		
* Urinary Bladder		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH      - Spleen    Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 30	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 323 <b>HISTO:</b> 9900890
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Mammary Gland	* Nose	* Pancreas	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Testes	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Parathyroid Gland
* Pituitary Gland	* Spleen	* Thymus	* Thyroid Gland
* Trachea			

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**OBSERVATIONS**

Peripheral Nerve [ Sarcoma TGLS = 1-14 ]	Sarcoma	
* Prostate Skel Muscle Note: TGL 1, "mass, 45 x 24 x 20 mm, mottled" noted at necropsy, did involve skeletal muscle, but was diagnosed under peripheral nerve.	Hyperplasia	Mild
* Stomach, Glandular [ Necrosis TGLS = 2-9+13 ]	Necrosis	Marked

---

**PRIMARY CAUSE OF DEATH** - Peripheral Nerve Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 31

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900891

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
* Lung	Alveolar Epith	Hyperplasia	Marked
	[ Hyperplasia TGLS = 3-4 ]		
* Nose	Olfactory Epi	Atrophy	Minimal
		Inflammation	Suppurative, Moderate
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-9 ]		
* Preputial Gland		Hyperplasia	Minimal
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Hyperplasia	Lymphoid, Focal, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 31	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900891
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 32

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 687

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900892

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric	* Mammary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Seminal Vesicle	* Spleen		

**OBSERVATIONS**

* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Mild
* Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
	Centrilobular	Necrosis	Mild
[ Fatty Change TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary GI			
Note: TGL 1, "mass" noted at necropsy was actually a subcutaneous skin mass.			
Mesentery		Mesothelioma Malignant	
	Fat	Necrosis	Mild
[ Mesothelioma Malignant TGLS = 6-12 ]			
[ Necrosis TGLS = 7-13 ]			
* Nose		Thrombosis	Mild
* Pancreas		Hyperplasia	Mild
Peritoneum		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 32	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 687 <b>HISTO:</b> 9900892
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Skin [ Fibroma TGLS = 1-14 ]	Subcut Tiss	Fibroma
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant

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PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 33

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 676

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900893

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Brain
* Esophagus	* Lung	* Mammary Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Skin	* Thymus
* Trachea			

**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Parathyroid Gland
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**AUTO PRECLUDES DIAG.**

* Bone Marrow	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Pancreas			

**OBSERVATIONS**

* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 3-8+13 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Pigmentation	Mild
* Liver		Fatty Change	Moderate
	Centrilobular	Necrosis	Moderate
		Thrombosis	Minimal
[ Fatty Change TGLS = 4-5+12 ]			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-14 ]			
* Nose		Thrombosis	Marked
Peritoneum		Mesothelioma Malignant	
* Prostate		Adenoma	
		Mesothelioma Malignant	
* Seminal Vesicle		Mesothelioma Malignant	
* Spleen		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 6-5 ]			
* Stomach, Forestomach		Mesothelioma Malignant	
* Stomach, Glandular		Mesothelioma Malignant	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 33	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 676 <b>HISTO:</b> 9900893
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant
* Thyroid Gland	C Cell Follicular Cel	Adenoma Adenoma
* Urinary Bladder		Mesothelioma Malignant

---

PRIMARY CAUSE OF DEATH - Peritoneum Mesothelioma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 34

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900894

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Nose	Olfactory Epi	Metaplasia	Minimal
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-9 ]			
* Prostate		Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,5-13 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 35

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 645

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900895

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Heart	* Mammary Gland	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin			

**MISSING**

\* Thymus

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Kidney			
Note: TGL 4, "discoloration, dark" noted at necropsy, was post mortem artifact.			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Moderate
		Regeneration	Mild
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
		Leukemia Mononuclear	
		Leukemia Mononuclear	
Lymph Node	Mediastinal		
[ Leukemia Mononuclear TGLS = 5-2 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-12 ]			
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 7-9 ]			
* Stomach, Glandular		Necrosis	Mild
[ Necrosis TGLS = 6-9+13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 35

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 645

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9900895

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 2-8 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 36

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900896

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 1-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
	[ Leukemia Mononuclear TGLS = 4-14 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Hyperplasia	Mild
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 36	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900896

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spleen		Hemorrhage	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-13 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 261 <b>HISTO:</b> 9900897
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Colon
* Intestine Large, Rectum	* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Testes	* Urinary Bladder	

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Nose	* Seminal Vesicle	* Stomach, Glandular	* Thyroid Gland
* Trachea			

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**INSUFFICIENT TISSUE**

\* Skin

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**OBSERVATIONS**

* Heart	Cardiomyopathy	Mild
	Hemorrhage	Mild
* Kidney	Nephropathy	Minimal
* Lung	Hemorrhage	Mild
[ Hemorrhage TGLS = 1-3+4 ]		
* Thymus	Hemorrhage	Moderate

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 38

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900898

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
Note: TGL 3, "deformity, 6 x 5 x 5 mm" noted at necropsy, was variation in normal lobar morphology.			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
	[ Hyperplasia TGLS = 2-5 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 39

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900899

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Parathyroid Gland

**INSUFFICIENT TISSUE**

\* Intestine Large, Rectum

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-2 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Mild
* Pituitary Gland		Angiectasis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 39	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900899
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Angiectasis TGLS = 6-9 ]			
* Preputial GI			
Note: TGL 5, "enlarged, 2x, green" noted at necropsy, was not apparent microscopically.			
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-13 ]			
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[ Fibrosis TGLS = 8-12 ]			
[ Leukemia Mononuclear TGLS = 3-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
		Leukemia Mononuclear	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 40

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 584

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900900

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Brain		Sarcoma	
[ Sarcoma TGLS = 2-12 ]			
* Kidney		Lymphoma Malignant	
		Nephropathy	Minimal
* Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
	Mediastinum	Lymphoma Malignant	
	Mediastinum	Necrosis	Fatty, Mild
Lymph Node	Mediastinal	Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 4-7 ]			
* Pancreas		Atrophy	Mild
		Lymphoma Malignant	
		Mixed Tumor Benign	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Thymus		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH

- Brain Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 40

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 584

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900900

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH

- Lymph Node;Mesenteric Lymphoma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 41

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900901

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Moderate
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas	Artery	Inflammation	Moderate
* Prostate		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 42

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 654

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900902

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-14 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Mesothelioma Malignant	
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 3-13 ]			
* Pancreas		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Preputial Gland		Adenoma	
* Prostate		Hyperplasia	Marked
* Seminal Vesicle		Mesothelioma Malignant	
* Spleen		Mesothelioma Malignant	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 42	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 654
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900902

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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		Mesothelioma Malignant	
[ Adenoma TGLS = 4-8+14 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	- Epididymis	Mesothelioma Malignant	

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 43	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900903

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 44

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900904

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-5 ]			
* Lung		Carcinoma	Metastatic (Zymbal'S Gland)
		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 3-12+13 ]			

**PRIMARY CAUSE OF DEATH**

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 45

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900905

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Marked
Eye	Retina	Atrophy	Marked
		Cataract	Marked
		[ Cataract TGLS = 1-13 ]	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Pancreas		Hyperplasia	Mild
* Salivary Glands		Atrophy	Mild
* Skin		Hyperkeratosis	Marked
		[ Hyperkeratosis TGLS = 3-12 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 2-8 ]	
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 45

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900905

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 46

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900906

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
		Infiltration Cellular	Histiocyte, Minimal
	[ Alveolar/Bronchiolar Adenoma TGLS = 4-12 ]		
Lymph Node	Mediastinal	Ectasia	Moderate
	[ Ectasia TGLS = 3-2 ]		
* Nose		Inflammation	Suppurative, Moderate
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-9 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Benign	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 46	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900906
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-8 ] * Thyroid Gland	C Cell C Cell Follicular Cel	Carcinoma Hyperplasia Hyperplasia	Minimal Mild
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 47

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900907

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Leukemia Mononuclear	
	Lymph Node		
	[ Leukemia Mononuclear TGLS = 5-2 ]		
* Lymph Node, Mesenteric	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-7 ]		
* Pancreas		Atrophy	Mild
Peritoneum		Mesothelioma Malignant	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 47	<b>TRT#:</b> 1 <b>DOSE:</b> 0.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900907
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Hyperplasia TGLS = 4-9 ]	Pars Distalis	Hyperplasia Leukemia Mononuclear	Mild
* Prostate		Hyperplasia Inflammation	Mild Chronic Active, Mild
* Spleen [ Leukemia Mononuclear TGLS = 1-12 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 48

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 698

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900908

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
	Centrilobular	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4,5,6,7,8-5+13 ]	Necrosis	Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 9-16 ]		
	[ Leukemia Mononuclear TGLS = 9-16 ]		
	[ Leukemia Mononuclear TGLS = 10-17 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 48	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 698
	<b>DOSE:</b> 0.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900908

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Mesentery [ Necrosis TGLS = 12-12 ]	Fat	Necrosis	Moderate
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland [ Adenoma TGLS = 11-9 ]	Pars Distalis	Adenoma Leukemia Mononuclear	
* Preputial Gland		Sarcoma	
* Prostate		Inflammation	Chronic Active, Moderate
* Spleen [ Leukemia Mononuclear TGLS = 1,2-14 ]		Fibrosis Leukemia Mononuclear	Mild
* Testes [ Adenoma TGLS = 3-8 ]	Interstit Cell	Adenoma Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 49

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900909

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		[ Clear Cell Focus TGLS = 4-14 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 2-12 ]	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 3-9 ]	
* Prostate		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 1-8 ]	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 49

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900909

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 50

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900910

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Alveolar/Bronchiolar Carcinoma	
	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland			
Note: TGL 2, "mass, 90 x 65 x 40 mm, tan" noted at necropsy, involved subcutis (skin).			
* Nose		Inflammation	Suppurative, Mild
Oral Mucosa	Pharyngeal	Necrosis	Mild
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Skin	Subcut Tiss	Lipoma	
	[ Lipoma TGLS = 2-12 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 50

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900910

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 51

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900911

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 6-15 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-14 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]			
* Pituitary Gland		Cyst	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 51	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900911
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate	Pars Distalis	Hyperplasia	Mild
* Skin	Subcut Tiss	Hyperplasia Fibroma	Moderate
[ Fibroma TGLS = 1-12 ]			
* Spleen		Hyperplasia Leukemia Mononuclear	Lymphoid, Focal, Marked
[ Hyperplasia TGLS = 5-16 ]			
[ Leukemia Mononuclear TGLS = 4-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,8-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 52

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900912

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Marked
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
		Carcinoma	
* Islets, Pancreatic			
[ Carcinoma TGLS = 4-13 ]			
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,5-12+14 ]			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-9 ]			
* Prostate		Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 52	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900912

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Salivary Glands		Basophilic Focus
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 3-8 ]		

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 53

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900913

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Islets, Pancreatic	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Skin	* Trachea		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-1 ]			
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leiomyoma	
[ Leiomyoma TGLS = 7-13 ]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
		Vacuolization Cytoplasmic	Focal, Mild
Note: TGL 9, "nodule, 1 cm x .3 cm, mottled" noted at trim, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-2 ]			

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:54

First Dose M/F: NA / NA

Lab: BAT

<b>ANIMAL ID:</b> 53	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900913

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric [ Leukemia Mononuclear TGLS = 5-12 ]		Leukemia Mononuclear	
* Nose	Olfactory Epi	Atrophy Leukemia Mononuclear	Mild
* Pituitary Gland	Olfactory Epi Pars Distalis	Metaplasia Hyperplasia Leukemia Mononuclear	Mild Mild
* Preputial Gland		Leukemia Mononuclear	
* Prostate		Hyperplasia	Minimal
* Salivary Glands		Atrophy Leukemia Mononuclear	Mild
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Fibrosis Leukemia Mononuclear Necrosis	Mild Mild
[ Leukemia Mononuclear TGLS = 1-15 ] [ Necrosis TGLS = 10-15 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular [ Leukemia Mononuclear TGLS = 11-17 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder [ Hemorrhage TGLS = 3-16 ]		Hemorrhage	Marked

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 54

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 709

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900914

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

\* Thyroid Gland

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
	Atrium	Thrombosis	Moderate
* Islets, Pancreatic		Carcinoma	
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
		Pigmentation	Moderate
* Liver		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 4,6-5 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Olfactory Epi	Atrophy	Minimal
		Thrombosis	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 54	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 709
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9900914

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Atrophy	Mild
		Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Prostate		Inflammation	Chronic Active, Moderate
* Skin	Prepuce	Hyperkeratosis	Moderate
		Inflammation	Suppurative, Moderate
[ Hyperkeratosis TGLS = 5-12 ]			
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Stomach, Forestomach		Ulcer	Mild
* Stomach, Glandular		Necrosis	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Thymus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 55	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 417
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9900915

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			

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**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 56

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900916

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
<p>Note: TGL 2, "focus, 5 x 4 mm, tan" noted at necropsy, was not apparent at trim or microscopically.          [ Hepatodiaphragmatic Nodule TGLS = 3-13 ]</p>			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
<p>[ Necrosis TGLS = 5-12 ]</p>			
* Pancreas		Atrophy	Marked
		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
<p>[ Adenoma TGLS = 4-9 ]</p>			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 56	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900916
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Hyperplasia	Lymphoid, Focal, Mild
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Carcinoma	

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 57

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900917

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Carcinoma	Metastatic (Thyroid Gland)
		Foreign Body	
		Inflammation	Chronic Active, Mild
Lymph Node	Deep Cervical	Carcinoma	Metastatic (Thyroid Gland)
	Mediastinal	Carcinoma	Metastatic (Thyroid Gland)
		[ Carcinoma TGLS = 2-2 ]	
		[ Carcinoma TGLS = 5-13 ]	
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Hyperkeratosis	Moderate
		[ Hyperkeratosis TGLS = 1-12 ]	
* Spleen		Hyperplasia	Lymphoid, Focal, Moderate
		[ Hyperplasia TGLS = 4-14 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 57	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900917
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma
* Thyroid Gland [ Carcinoma TGLS = 6-2 ]	C Cell	Carcinoma

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 58

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 680

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900918

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

\* Intestine Small, Ileum

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
	Atrium	Thrombosis	Mild
* Kidney		Infarct	Moderate
		Leukemia Mononuclear	
	[ Infarct TGLS = 5-6 ]		
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
Note: TGL 6, "deformity, 3 x 3 mm" noted at trim, was not apparent microscopically.			
	[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]		
	[ Leukemia Mononuclear TGLS = 3-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 58	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 680 <b>HISTO:</b> 9900918
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Thrombosis	Minimal
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-12 ]			
* Stomach, Forestomach		Ulcer	Moderate
* Stomach, Glandular		Necrosis	Moderate
[ Necrosis TGLS = 7-9 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 59

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 649

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900919

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
	Centrilobular	Leukemia Mononuclear	
		Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung	Alveolar Epith	Hyperplasia	Marked
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery		Leukemia Mononuclear	
	Fat	Necrosis	Mild
	[ Necrosis TGLS = 4-12 ]		
* Parathyroid Gland		Adenoma	
* Pituitary Gland		Leukemia Mononuclear	
* Skin		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 59	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 649
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900919

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 1-13 ]		Leukemia Mononuclear
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 60

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900920

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Prostate		Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Moderate

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 61

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900921

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-12 ]			
* Pancreas		Atrophy	Mild
		Basophilic Focus	
* Parathyroid Gland		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 62

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900922

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Preputial Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Trachea		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Hydronephrosis	Moderate
		Mineralization	Mild
	Papilla	Necrosis	Mild
		Nephropathy	Moderate
[ Hydronephrosis TGLS = 6-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
* Lung		Alveolar/Bronchiolar Carcinoma	
	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
		Mineralization	Mild
[ Alveolar/Bronchiolar Carcinoma TGLS = 3-4 ]			
Lymph Node			
Note: TGL 4, "discolored, purple" noted at necropsy, was not apparent microscopically.			
* Pancreas		Atrophy	Mild
		Hyperplasia	Marked
* Parathyroid Gland		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 62	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 726
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900922

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5-9 ]			
* Prostate		Hemangiosarcoma	
[ Hemangiosarcoma TGLS = 1-12+13 ]			
* Seminal Vesicle		Inflammation	Chronic Active, Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach, Glandular		Mineralization	Mild
		Necrosis	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Inflammation	Chronic Active, Moderate

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PRIMARY CAUSE OF DEATH	- Prostate Hemangiosarcoma
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 63

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 550

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900923

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Mammary Gland
* Nose	* Parathyroid Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Islets, Pancreatic	* Lymph Node, Mandibular	* Pancreas	* Preputial Gland
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**AUTO PRECLUDES DIAG.**

* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-1 ]		
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Moderate
	[ Necrosis TGLS = 3,4-12+13 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-2 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-14 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 63	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 550 <b>HISTO:</b> 9900923
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Stomach, Forestomach [ Ulcer TGLS = 7-15 ]		Ulcer	Mild
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 64

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900924

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**INSUFFICIENT TISSUE**

\* Skin

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 4-12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 5-15 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-13 ]			
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 64	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900924
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Salivary Glands		Atrophy	Mild
* Testes [ Adenoma TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 65

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900925

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
Eye	Retina	Atrophy	Marked
		Cataract	Moderate
[ Cataract TGLS = 1-13 ]			
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-12 ]			
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 65

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900925

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 66

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 698

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900926

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Pancreas	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Lung		Carcinoma	Metastatic (Zymbal'S Gland)
	Alveolar Epith	Hyperplasia	Marked
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Carcinoma	Metastatic (Zymbal'S Gland)
[ Carcinoma TGLS = 4-12 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Nose		Inflammation	Suppurative, Minimal
* Parathyroid Gland		Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 66	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 698 <b>HISTO:</b> 9900926
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Leukemia Mononuclear	
* Stom Forestom			
Note: TGL 6, "lesion, 3 mm diam, pale" noted at trim, was not apparent microscopically.			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 3-14 ]			

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PRIMARY CAUSE OF DEATH	- Zymbal's Gland Carcinoma
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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 67

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900927

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**INSUFFICIENT TISSUE**

\* Skin

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Prostate		Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 67

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900927

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 68

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 456

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900928

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
Note: TGL 3, "discoloration, diffuse, pale" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Thrombosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-13 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Testes		Atrophy	Moderate
	Interstit Cell	Hyperplasia	Mild
[ Atrophy TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

- Preputial Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 69

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900929

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign Pheochromocytoma Complex	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear Nephropathy	Moderate
* Liver		Basophilic Focus Clear Cell Focus	
	Bile Duct	Hyperplasia Inflammation Inflammation Leukemia Mononuclear	Mild Granulomatous, Focal, Minimal Histiocytic, Focal, Mild
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular Leukemia Mononuclear	Minimal Histiocyte, Minimal
Lymph Node	Mediastinal Pancreatic	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation Leukemia Mononuclear	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Keratoacanthoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 69	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900929

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Keratoacanthoma TGLS = 4-12 ]			
* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[ Fibrosis TGLS = 2-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,5-8 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 70

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900930

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Stomach, Forestomach	* Testes	* Trachea

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Islets, Pancreatic		Adenoma	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	

Note: TGL 4, "deformity, 8 x 7 x 4 mm" noted at necropsy, was normal variation in lobar morphology.

[ Hepatodiaphragmatic Nodule TGLS = 3-13 ]

[ Leukemia Mononuclear TGLS = 5-5 ]

* Lung		Leukemia Mononuclear	
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Note: TGL 8, "focus, .5 x .4 cm, pale" noted at trimming, was artifact.

Lymph Node	Mediastinal	Leukemia Mononuclear	
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[ Leukemia Mononuclear TGLS = 7-2 ]

* Lymph Node, Mesenteric		Leukemia Mononuclear	
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* Nose		Leukemia Mononuclear	
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* Pancreas		Leukemia Mononuclear	
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 70	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900930
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 6-9 ]	Pars Distalis	Adenoma Leukemia Mononuclear	
* Prostate		Leukemia Mononuclear	
* Salivary Glands		Leukemia Mononuclear	
* Seminal Vesicle		Leukemia Mononuclear	
* Skin [ Squamous Cell Carcinoma TGLS = 1-12 ]		Squamous Cell Carcinoma	
* Spleen [ Leukemia Mononuclear TGLS = 2-16 ]		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 71

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900931

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 72

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 649

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900932

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Islets, Pancreatic		Cardiomyopathy	Mild
* Kidney		Adenoma	
		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
	Centrilobular	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5,6-13+5 ]	Necrosis	Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 7-14 ]	
Mesentery	Fat	Necrosis	Mild
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 72	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 649
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900932

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 1-12 ]		Leukemia Mononuclear
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 2-8 ]		
* Thyroid Gland	C Cell	Adenoma
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 73

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 661

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900933

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Preputial Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Necrosis	Mild
* Heart	Atrium	Thrombosis	Mild
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Infarct TGLS = 8-6 ]			
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Thrombosis	Minimal
Lymph Node	Bronchial	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Goblet Cell, Respirat Epith	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 73	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 661
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900933

**ORGAN AND ACCOUNTABLE SITE STATUS**

		Inflammation	Suppurative, Mild
		Thrombosis	Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	
* Prostate		Hyperplasia	Minimal
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2,3,4-12+14+13 ]		
* Stomach, Glandular		Necrosis	Mild
	[ Necrosis TGLS = 9-9+15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild
<b>PRIMARY CAUSE OF DEATH</b>		- Spleen Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 74	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 564
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900934

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Prostate
* Salivary Glands	* Stomach, Forestomach	* Thymus	* Thyroid Gland
* Trachea			

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-8 ]			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Mesothelioma Malignant	
* Intestine Small, Duodenum		Mesothelioma Malignant	
* Intestine Small, Ileum		Mesothelioma Malignant	
* Intestine Small, Jejunum		Mesothelioma Malignant	
* Kidney		Nephropathy	Mild
		Pigmentation	Moderate
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 7-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Mesothelioma Malignant	
* Mammary GI			
Note: TGL 6, "mass, 100 x 80 x 50 mm, tan" noted at necropsy, actually involved subcutaneous skin.			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 8-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 74	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 564 <b>HISTO:</b> 9900934
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Atrophy	Minimal
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-12 ]		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 9-9 ]			
* Preputial Gland		Hyperplasia	Mild
* Seminal Vesicle		Mesothelioma Malignant	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 6-14 ]			
* Spleen		Mesothelioma Malignant	
* Stomach, Glandular		Mesothelioma Malignant	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-8 ]		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 3-8 ]			
* Urinary Bladder		Mesothelioma Malignant	

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**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Fibroma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 75

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900935

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
		Metaplasia	Squamous, Mild
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 2-13 ]			
* Parathyroid Gland		Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Hyperplasia	Moderate
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 4-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 75	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900935
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland Tongue [ Squamous Cell Papilloma TGLS = 3-12 ]	C Cell	Hyperplasia Squamous Cell Papilloma	Mild
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 76

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900936

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
Note: TGL 2, "deformity, 5 x 5 x 2 mm" noted at necropsy, was not apparent microscopically. [ Clear Cell Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 76

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900936

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:54  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 77

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900937

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Pancreas		Basophilic Focus	
* Prostate		Hyperplasia	Minimal
* Testes	Interstit Cell	Adenoma	
		Atrophy	Moderate
		[ Adenoma TGLS = 1-8 ]	
		[ Atrophy TGLS = 2-8 ]	
* Thyroid Gland	C Cell	Hyperplasia	Moderate

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 78

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 721

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900938

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Moderate
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
* Lung			
Note: TGL 1, "discoloration, dark" noted at necropsy, was due to post mortem pooling of blood.			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 79

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900939

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 8-6 ]			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
[ Nephropathy TGLS = 5-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
		Leukemia Mononuclear	
Note: Lymph node with no site listed was axillary node.			
[ Leukemia Mononuclear TGLS = 6-2 ]			
[ Leukemia Mononuclear TGLS = 10-16 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 79	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900939
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 7-8 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 9-15 ]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland		Cyst	Minimal
		Leukemia Mononuclear	
* Prostate		Leukemia Mononuclear	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Urinary Bladder		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 80

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900940

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Clear Cell Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Skin		Hyperkeratosis	Marked
[ Hyperkeratosis TGLS = 1-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:55

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 80

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900940

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 81

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 558

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900941

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

Eye	Cornea	Inflammation	Suppurative, Moderate
	Cornea	Mineralization	Mild
[ Inflammation TGLS = 3-13 ]			
* Kidney		Mineralization	Mild
		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
* Lung	Alveolar Epith	Hyperplasia	Mild
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Stomach, Forestomach		Hyperkeratosis	Mild
[ Hyperkeratosis TGLS = 4-9 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thymus		Atrophy	Mild
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 2-12 ]			

**PRIMARY CAUSE OF DEATH**

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 82

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900942

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Carcinoma	
		Nephropathy	Mild
[ Carcinoma TGLS = 1-6 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Skin	Subcut Tiss	Lipoma	
[ Lipoma TGLS = 2-13 ]			
* Testes		Atrophy	Moderate
	Interstit Cell	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 82

**TRT#:** 3  
**DOSE:** 0.25%

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 9900942

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Follicular Cel

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:55

**First Dose M/F:** NA / NA

**Lab:** BAT

**ANIMAL ID:** 83

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900943

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Mild
* Skin	Subcut Tiss	Fibroma	
		Squamous Cell Carcinoma	
		[ Fibroma TGLS = 3-14 ]	
		[ Squamous Cell Carcinoma TGLS = 1-13 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 2-8 ]	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 84

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900944

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia Inflammation	Mild Granulomatous, Minimal
* Adrenal Medulla		Hyperplasia	Marked
* Heart		Cardiomyopathy	Mild
* Intestine Small, Ileum		Polyp Adenomatous	
[ Polyp Adenomatous TGLS = 3-13 ]			
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 4-14 ]			
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Clear Cell Focus Hyperplasia Inflammation Inflammation	Minimal Histiocytic, Focal, Minimal Granulomatous, Focal, Minimal
Note: TGL 2, "deformity, 3 x 2 x 2 mm" noted at necropsy, was not apparent microscopically.			
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal
* Nose		Foreign Body Inflammation	Suppurative, Moderate
Note: Foreign body was fungal hyphae.			
* Pancreas		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 84	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900944
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

---

PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 505
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900945

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Trachea	* Urinary Bladder		

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**MISSING**

\* Lymph Node, Mandibular

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Salivary Glands		Schwannoma Malignant	
	[ Schwannoma Malignant TGLS = 1-12+13 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH** - Salivary Glands Schwannoma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 86

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900946

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia Metaplasia Nephropathy	Mild Osseous, Mild Marked
	[ Metaplasia TGLS = 4-6 ]		
* Liver		Basophilic Focus Clear Cell Focus Inflammation Inflammation Mixed Cell Focus	Granulomatous, Focal, Mild Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular	Mild Histiocyte, Minimal
* Mammary GI			
Note: TGL 1 and TGL 2 both involved skin.			
* Nose		Foreign Body Inflammation	Suppurative, Moderate
Note: Foreign body was fungal hyphae.			
* Pancreas		Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 86	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900946
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 6-15 ]		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 5-9 ]			
* Prostate		Hyperplasia	Moderate
* Salivary Glands		Atrophy	Mild
* Skin		Keratoacanthoma	Multiple
[ Keratoacanthoma TGLS = 1,2-13+14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 87

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900947

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Hyperplasia	Mild
		Inflammation	Chronic Active, Moderate
[ Inflammation TGLS = 2-8 ]			
* Skin		Hyperkeratosis	Marked
[ Hyperkeratosis TGLS = 4-14+12 ]			
* Stomach, Glandular		Metaplasia	Marked
[ Metaplasia TGLS = 5-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 87	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900947
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 88

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 554

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900948

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Esophagus	* Intestine Large, Rectum	* Kidney
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Stomach, Forestomach
* Thymus			

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Pituitary Gland
* Seminal Vesicle	* Stomach, Glandular	* Thyroid Gland	* Trachea

**OBSERVATIONS**

* Brain		Granular Cell Tumor Benign	
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 4-8 ]			
* Heart		Cardiomyopathy	Mild
* Liver	Centrilobular	Necrosis	Moderate
[ Necrosis TGLS = 6-5 ]			
* Lung			
Note: TGL 10, "nodule, 3 mm diam, pale" noted at trim, was not apparent microscopically due to post mortem autolysis.			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 8-13 ]			
* Nose		Inflammation	Suppurative, Minimal
		Thrombosis	Marked
* Pancreas		Mesothelioma Malignant	
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-14 ]			
* Pituitary Gl			
Note: TGL 9, "focus, red, 1 x 1 mm" noted at necropsy, was not apparent microscopically due to post mortem autolysis.			
* Prostate		Mesothelioma Malignant	
* Skin		Keratoacanthoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 88

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 554

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900948

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Keratoacanthoma TGLS = 12-15 ]

\* Spleen

Mesothelioma Malignant

[ Mesothelioma Malignant TGLS = 7-12 ]

\* Stom Gland

Note: TGL 11, "lesion, 1-2 mm, dark, multiple" noted at trim, was not apparent microscopically due to post mortem autolysis.

\* Testes

Bilateral, Interstit Cell

Adenoma

Mesothelioma Malignant

[ Adenoma TGLS = 2-8 ]

[ Mesothelioma Malignant TGLS = 3-8 ]

\* Urinary Bladder

Mesothelioma Malignant

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PRIMARY CAUSE OF DEATH

- Peritoneum Mesothelioma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 89

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 586

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900949

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Prostate	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
	[ Alveolar/Bronchiolar Adenoma TGLS = 4-4 ]		
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Adenoma	
* Salivary Glands		Schwannoma Malignant	
	[ Schwannoma Malignant TGLS = 1-12 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
	[ Hematopoietic Cell Proliferation TGLS = 3-5 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2-8 ]		

**PRIMARY CAUSE OF DEATH**

- Salivary Glands Schwannoma Malignant

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 90

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 716

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900950

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Mammary Gland

**AUTO PRECLUDES DIAG.**

\* Intestine Small, Ileum

**OBSERVATIONS**

* Adrenal Cortex		Necrosis	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Polyp Adenomatous	
[ Polyp Adenomatous TGLS = 5-13 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
Note: TGL 3, "deformity, 5 x 5 x 4 mm" noted at necropsy, was not apparent microscopically.			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-9 ]			
* Prostate		Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Inflammation	Chronic Active, Moderate
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 90

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 716

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9900950

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 91

TRT#: 3

SEX: Male

DAY ON TEST: 684

DOSE: 0.25%

DISP: Moribund Sacrifice

HISTO: 9900951

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                   | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Mammary Gland             |
| * Pancreas               | * Parathyroid Gland        | * Prostate                | * Seminal Vesicle           |
| * Skin                   | * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |

MISSING

- |                          |                   |          |
|--------------------------|-------------------|----------|
| * Lymph Node, Mandibular | * Preputial Gland | * Thymus |
|--------------------------|-------------------|----------|

OBSERVATIONS

- |                                             |               |                       |                          |
|---------------------------------------------|---------------|-----------------------|--------------------------|
| * Adrenal Cortex                            |               | Leukemia Mononuclear  |                          |
| * Adrenal Medulla                           |               | Leukemia Mononuclear  |                          |
| * Bone Marrow                               |               | Leukemia Mononuclear  |                          |
| * Heart                                     |               | Leukemia Mononuclear  |                          |
| * Kidney                                    |               | Infarct               | Moderate                 |
|                                             |               | Leukemia Mononuclear  |                          |
|                                             |               | Nephropathy           | Mild                     |
| [ Infarct TGLS = 8,9-6+14 ]                 |               |                       |                          |
| * Liver                                     |               | Degeneration          | Cystic, Mild             |
|                                             | Bile Duct     | Hyperplasia           | Mild                     |
|                                             |               | Inflammation          | Histiocytic, Focal, Mild |
|                                             |               | Leukemia Mononuclear  |                          |
| [ Degeneration TGLS = 6-21 ]                |               |                       |                          |
| [ Leukemia Mononuclear TGLS = 4,5-13+5 ]    |               |                       |                          |
| * Lung                                      |               | Infiltration Cellular | Histiocyte, Minimal      |
|                                             |               | Leukemia Mononuclear  |                          |
| Lymph Node                                  | Deep Cervical | Leukemia Mononuclear  |                          |
|                                             | Mediastinal   | Leukemia Mononuclear  |                          |
|                                             | Pancreatic    | Leukemia Mononuclear  |                          |
| [ Leukemia Mononuclear TGLS = 12-15 ]       |               |                       |                          |
| [ Leukemia Mononuclear TGLS = 15-2 ]        |               |                       |                          |
| [ Leukemia Mononuclear TGLS = 13,14-19+20 ] |               |                       |                          |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 91	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 684
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900951

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mesenteric [ Leukemia Mononuclear TGLS = 11-17 ]		Leukemia Mononuclear	
Mesentery [ Necrosis TGLS = 10-18 ]	Fat	Necrosis	Moderate
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Salivary Glands		Atrophy	Mild
		Inflammation	Suppurative, Minimal
* Spleen [ Leukemia Mononuclear TGLS = 1-12 ] [ Necrosis TGLS = 2-12 ]		Leukemia Mononuclear Necrosis	Moderate
* Stomach, Forestomach [ Ulcer TGLS = 18-16 ]		Hyperplasia Ulcer	Squamous, Moderate Moderate
* Stomach, Glandular		Necrosis	Mild
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma	

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 92

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 528

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900952

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Preputial Gland
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**OBSERVATIONS**

* Kidney		Nephropathy	Mild
* Liver		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Mild
		Fibrosarcoma	Metastatic (Tissue Nos)
[ Fibrosarcoma TGLS = 4,5-12+5 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			
Tissue NOS		Fibrosarcoma	
[ Fibrosarcoma TGLS = 1,2-13+14 ]			

**PRIMARY CAUSE OF DEATH** - Tissue NOS Fibrosarcoma

Animal Note: The masses (TGL 1 and TGL 2) noted as mammary and tissue NOS at necropsy were al l one tumor of uncertain origin.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 93

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900953

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Pancreas		Hyperplasia	Mild
* Pituitary Gland		Cyst	Minimal
	Pars Distalis	Hyperplasia	Minimal
* Prostate		Adenoma	
* Testes	Interstitial Cell	Adenoma	
		Atrophy	Marked
[ Adenoma TGLS = 1-8 ]			
[ Atrophy TGLS = 2-8 ]			
* Thyroid Gland	Follicular Cel	Adenoma	
[ Adenoma TGLS = 4-2 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 94

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900954

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Skin	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
	Atrium	Cardiomyopathy	Minimal
		Thrombosis	Mild
* Intestine Large, Cecum		Leukemia Mononuclear	
		Ulcer	Marked
		[ Ulcer TGLS = 9-7 ]	
* Kidney		Infarct	Minimal
		Leukemia Mononuclear	
		Nephropathy	Mild
		[ Infarct TGLS = 11-16 ]	
* Liver		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 6-5 ]	
* Lung		Leukemia Mononuclear	
		Sarcoma	Metastatic (Salivary Glands)
Lymph Node	Mediastinal	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 7-2 ]	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 94

TRT#: 3

SEX: Male

DAY ON TEST: 614

DOSE: 0.25%

DISP: Moribund Sacrifice

HISTO: 9900954

ORGAN AND ACCOUNTABLE SITE STATUS

[ Leukemia Mononuclear TGLS = 8-7+17 ]

* Nose	Inflammation	Suppurative, Mild
* Pancreas	Atrophy	Marked
	Leukemia Mononuclear	
* Pituitary Gland	Leukemia Mononuclear	
* Prostate	Leukemia Mononuclear	
* Salivary Glands	Sarcoma	
[ Sarcoma TGLS = 1-18 ]		
* Seminal Vesicle	Leukemia Mononuclear	
* Spleen	Leukemia Mononuclear	
	Necrosis	Mild

[ Leukemia Mononuclear TGLS = 3,10-12+15 ]

[ Necrosis TGLS = 4,5,10-13+14+15 ]

* Stomach, Forestomach	Ulcer	Mild
[ Ulcer TGLS = 12-9 ]		
* Stomach, Glandular	Leukemia Mononuclear	
	Necrosis	Mild
[ Necrosis TGLS = 12-9 ]		
* Testes	Bilateral, Interstit Cell	Adenoma

[ Adenoma TGLS = 2-8 ]

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Salivary Glands Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 95

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900955

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Prostate		Hyperplasia	Mild
* Salivary Glands		Atrophy	Mild
* Skin	Sebaceous GI	Adenoma	
	[ Adenoma TGLS = 1-13 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 95	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900955
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 96

TRT#: 3

SEX: Male

DAY ON TEST: 717

DOSE: 0.25%

DISP: Natural Death

HISTO: 9900956

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Mandibular	* Mammary Gland
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* Bone Marrow	* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Seminal Vesicle			

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Moderate
* Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Mild
	Centrilobular	Leukemia Mononuclear	
		Necrosis	Minimal
Note: TGL 5,"nodule, 3 x 3 x 0.5 mm" noted at necropsy, was not apparent microscopically. [ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 96	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 717 <b>HISTO:</b> 9900956
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Skin [ Inflammation TGLS = 1-13 ]		Foreign Body Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach [ Leukemia Mononuclear TGLS = 6-14 ]		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Carcinoma	

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PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 97

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900957

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 5-13 ]			
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Atrophy	Moderate
* Pancreas		Adenoma	
* Pituitary Gland	Pars Distalis		
[ Adenoma TGLS = 1-9 ]			
* Prostate		Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
* Salivary Glands		Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 97	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900957
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 3-5 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 2-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 98

TRT#: 3

SEX: Male

DAY ON TEST: 728

DOSE: 0.25%

DISP: Natural Death

HISTO: 9900958

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                           |                             |                            |
|--------------------------|---------------------------|-----------------------------|----------------------------|
| * Bone                   | * Epididymis              | * Esophagus                 | * Intestine Large, Cecum   |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Jejunum |
| * Islets, Pancreatic     | * Mammary Gland           | * Parathyroid Gland         | * Pituitary Gland          |
| * Preputial Gland        | * Prostate                | * Seminal Vesicle           | * Skin                     |
| * Stomach, Forestomach   | * Stomach, Glandular      | * Trachea                   | * Urinary Bladder          |

MISSING

- |                          |                   |
|--------------------------|-------------------|
| * Lymph Node, Mandibular | * Salivary Glands |
|--------------------------|-------------------|

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- |                          |                 |
|--------------------------|-----------------|
| * Intestine Small, Ileum | * Thyroid Gland |
|--------------------------|-----------------|

OBSERVATIONS

- |                          |                                     |                                                                                     |                                             |
|--------------------------|-------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------|
| * Adrenal Cortex         |                                     | Leukemia Mononuclear<br>Necrosis                                                    | Moderate                                    |
| * Adrenal Medulla        |                                     | Leukemia Mononuclear<br>Pheochromocytoma Benign                                     |                                             |
| * Bone Marrow            |                                     | Leukemia Mononuclear                                                                |                                             |
| * Brain                  |                                     | Leukemia Mononuclear                                                                |                                             |
| * Heart                  |                                     | Cardiomyopathy                                                                      | Moderate                                    |
| * Kidney                 |                                     | Leukemia Mononuclear<br>Nephropathy                                                 | Mild                                        |
| * Liver                  | Bile Duct                           | Basophilic Focus<br>Hyperplasia<br>Inflammation<br>Leukemia Mononuclear<br>Necrosis | Mild<br>Histiocytic, Focal, Minimal<br>Mild |
|                          | Centrilobular                       |                                                                                     |                                             |
|                          | [ Leukemia Mononuclear TGLS = 3-5 ] |                                                                                     |                                             |
| * Lung                   |                                     | Infiltration Cellular<br>Leukemia Mononuclear                                       | Histiocyte, Minimal                         |
| * Lymph Node, Mesenteric |                                     | Inflammation<br>Leukemia Mononuclear                                                | Granulomatous, Marked                       |
|                          | [ Inflammation TGLS = 5-7 ]         |                                                                                     |                                             |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 98	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 728 <b>HISTO:</b> 9900958
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Mesentery [ Necrosis TGLS = 4-13 ]	Fat	Necrosis	Moderate
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Hyperplasia	Mild
		Leukemia Mononuclear	
		Thrombosis	Minimal
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thymus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 99

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 711

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9900959

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Pancreas	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
	Atrium	Thrombosis	Marked
Note: TGL 6, "focus, 2 x 2 mm, tan" noted at necropsy, was not apparent microscopically.			
[ Thrombosis TGLS = 4-12+13 ]			
* Intestine Large, Colon		Ulcer	Mild
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Infarct TGLS = 3-6 ]			
* Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Fatty Change TGLS = 2-5 ]			
* Lung		Alveolar/Bronchiolar Carcinoma	
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-3 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 99	<b>TRT#:</b> 3 <b>DOSE:</b> 0.25%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 711 <b>HISTO:</b> 9900959
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Thrombosis	Mild
* Pituitary Gland	Pars Intermed	Adenoma	
		Cyst	Minimal
	Pars Distalis	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular		Necrosis	Mild
[ Necrosis TGLS = 7-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Adenoma	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 100

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9900960

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 101

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900961

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Intestine Small, Jejunum		Carcinoma	
[ Carcinoma TGLS = 8-13 ]			
* Kidney	Transit Epithe	Hyperplasia	Mild
		Leukemia Mononuclear	
		Nephropathy	Marked
[ Nephropathy TGLS = 5-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Moderate
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung	Bronchial	Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-2+3 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 101	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 726 <b>HISTO:</b> 9900961
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma Leukemia Mononuclear	
[ Adenoma TGLS = 1-9 ]			
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-8+14 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell C Cell	Carcinoma Hyperplasia	Moderate
[ Carcinoma TGLS = 7-2 ]			
* Urinary Bladder		Leukemia Mononuclear	

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 102

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900962

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Bone		Osteosarcoma	
[ Osteosarcoma TGLS = 4-16 ]			
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 5-3+4 ]			
* Prostate		Inflammation	Chronic Active, Moderate
Spinal Cord		Osteosarcoma	Metastatic (Bone)
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Urinary Bladder		Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 3-15 ]			

**PRIMARY CAUSE OF DEATH**

- Bone Osteosarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 102

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900962

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 103

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900963

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Cecum		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-15 ]		
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 103	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900963
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland	Pars Distalis	Leukemia Mononuclear Hyperplasia	Mild
* Prostate		Leukemia Mononuclear Hyperplasia	Mild
* Salivary Glands		Basophilic Focus	
* Spleen		Hyperplasia Leukemia Mononuclear	Lymphoid, Focal, Mild
	[ Hyperplasia TGLS = 5-13 ]		
	[ Leukemia Mononuclear TGLS = 1-12 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-8 ]		
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 104

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 698

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900964

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
		Thrombosis	Mild
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Inflammation	Chronic Active, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 104	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 698 <b>HISTO:</b> 9900964
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 3-12 ]		Fibrosis Leukemia Mononuclear	Mild
* Stomach, Forestomach [ Hyperplasia TGLS = 5-13 ]		Hyperplasia	Squamous, Moderate
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 105

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900965

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Marked
		Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 7-6 ]		
* Heart		Cardiomyopathy	Mild
* Kidney		Cyst	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
	[ Cyst TGLS = 5-6 ]		
* Liver		Basophilic Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 9-3+4 ]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 105	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9900965
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 8-7 ]			
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-9 ]			
* Preputial Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 4-8 ]			
* Prostate		Hyperplasia Inflammation	Mild Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 106

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900966

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-5+13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-12 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 2-12 ]			
* Prostate		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 106

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900966

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thymus

Thymoma Benign

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 107

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 725

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9900967

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Marked
* Heart		Cardiomyopathy	Mild
* Intestine Large, Cecum		Inflammation	Acute, Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Moderate
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Galactocele	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Salivary Glands		Sarcoma	
[ Sarcoma TGLS = 4-12 ]			
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 108

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900968

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		[ Clear Cell Focus TGLS = 4-5 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 3-5 ]	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Prostate		Inflammation	Chronic Active, Minimal
* Skin	Subcut Tiss	Fibroma	
		[ Fibroma TGLS = 6-13 ]	
* Spleen		Leukemia Mononuclear	
		Note: TGL 5, "nodule, 2-3 mm dia, multiple" noted at trim, was not apparent microscopically.	
		[ Leukemia Mononuclear TGLS = 1-5 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 108

**TRT#:** 5  
**DOSE:** 1.0%

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9900968

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**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Adenoma TGLS = 2-8 ]

\* Thyroid Gland

C Cell  
Follicular Cel

Hyperplasia  
Hyperplasia

Minimal  
Mild

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 109	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 627 <b>HISTO:</b> 9900969
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland	* Thymus
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
	[ Hepatodiaphragmatic Nodule TGLS = 2-5 ]		
* Lung		Sarcoma	Metastatic (Salivary Glands)
* Nose	Olfactory Epi	Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands		Sarcoma	
	[ Sarcoma TGLS = 4-12 ]		
* Spleen		Hematopoietic Cell Proliferation	Mild
	[ Hematopoietic Cell Proliferation TGLS = 3-5 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Salivary Glands Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 110

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900970

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Lymphoma Malignant	
* Adrenal Medulla		Hyperplasia	Mild
		Lymphoma Malignant	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Cecum		Lymphoma Malignant	
* Kidney		Lymphoma Malignant	
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		Lymphoma Malignant	
[ Basophilic Focus TGLS = 6-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
		Lymphoma Malignant	
[ Hyperplasia TGLS = 5-3 ]			
* Lymph Node, Mesenteric		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 4-7+13 ]			
* Nose		Lymphoma Malignant	
* Pancreas		Atrophy	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:55

**First Dose M/F:** NA / NA

**Lab:** BAT

**ANIMAL ID:** 110

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900970

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Hyperplasia	Mild
* Spleen		Lymphoma Malignant	
[ Lymphoma Malignant TGLS = 2,3-12+5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thymus		Lymphoma Malignant	
* Thyroid Gland	C Cell	Adenoma	
Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 7-14 ]			
* Trachea		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 111

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 584

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900971

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
Eye	Retina	Atrophy	Marked
		Cataract	Marked
[ Cataract TGLS = 1-14 ]			
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 3-12 ]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
[ Nephropathy TGLS = 7-6 ]			
* Liver	Bile Duct	Fatty Change	Moderate
		Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Moderate
[ Leukemia Mononuclear TGLS = 6-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-13 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-7 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 111	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 584 <b>HISTO:</b> 9900971
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose		Thrombosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Chronic Active, Moderate
* Spleen [ Leukemia Mononuclear TGLS = 5-5 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Ulcer	Moderate
* Stomach, Glandular		Necrosis	Mild
* Testes [ Adenoma TGLS = 4-8 ]	Interstit Cell	Adenoma	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 112

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900972

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
Eye		Degeneration	Moderate
[ Degeneration TGLS = 1-15 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Minimal
[ Clear Cell Focus TGLS = 6-14+5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Hyperplasia	Mild
[ Hyperplasia TGLS = 5-2 ]			
* Pancreas		Hyperplasia	Moderate
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 4-8 ]			
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 2-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 112	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900972
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 3-12 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 113

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 712

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900973

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Brain		Necrosis	Mild
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
[ Schwannoma Benign TGLS = 5-14 ]			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Ectasia	Marked
[ Ectasia TGLS = 2-13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-15 ]			
* Prostate		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 113	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 712 <b>HISTO:</b> 9900973
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland Zymbal's Gland [ Carcinoma TGLS = 3-12 ]	C Cell	Hyperplasia Carcinoma	Minimal
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PRIMARY CAUSE OF DEATH - Zymbal's Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 114

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 682

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900974

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Trachea	* Urinary Bladder

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
	Atrium	Thrombosis	Moderate
* Intestine Large, Cecum		Ulcer	Moderate
[ Ulcer TGLS = 7-7 ]			
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
		Pigmentation	Moderate
[ Infarct TGLS = 5-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Thrombosis	Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 114	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 682 <b>HISTO:</b> 9900974
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**ORGAN AND ACCOUNTABLE SITE STATUS**

	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-2 ]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Olfactory Epi	Atrophy	Minimal
		Inflammation	Suppurative, Mild
		Thrombosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
		Necrosis	Moderate
	[ Leukemia Mononuclear TGLS = 2-12 ]		
	[ Necrosis TGLS = 3-13 ]		
* Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
* Stomach, Glandular		Necrosis	Mild
	[ Necrosis TGLS = 8-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 115

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 598

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900975

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Mild
		Mineralization	Mild
		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Mild
* Parathyroid Gland		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Inflammation	Chronic Active, Mild
* Stomach, Forestomach		Ulcer	Mild
[ Ulcer TGLS = 3-9+12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 116

**TRT#:** 5  
**DOSE:** 1.0%

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9900976

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
* Bone Marrow		Inflammation	Granulomatous, Minimal
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-8+13 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Cyst	Moderate
		Leukemia Mononuclear	
		Nephropathy	Moderate
[ Cyst TGLS = 6-6 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 8-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 116	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 1.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9900976

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Lymph Node, Mesenteric Mesentery [ Necrosis TGLS = 3-14 ]	Fat	Metaplasia Leukemia Mononuclear Mesothelioma Malignant Necrosis	Squamous, Minimal  Moderate
* Pancreas Peritoneum * Pituitary Gland [ Adenoma TGLS = 7-9 ] * Spleen [ Hyperplasia TGLS = 5-5 ] [ Leukemia Mononuclear TGLS = 4-12 ]	Pars Distalis	Mesothelioma Malignant Mesothelioma Malignant Adenoma  Hyperplasia Leukemia Mononuclear Mesothelioma Malignant	Lymphoid, Focal, Moderate
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 117

TRT#: 5

SEX: Male

DAY ON TEST: 647

DOSE: 1.0%

DISP: Natural Death

HISTO: 9900977

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
* Lung			
Note: TGL 2, "discoloration, dark" noted at necropsy, was due to post mortem pooling of blood.			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 118

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900978

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	Lymph Node
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		Infiltration Cellular	Histiocyte, Minimal
* Lung			
Lymph Node			
Note: TGL 3, "enlarged, 3x" noted at necropsy, was within normal limits microscopically.			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-13 ]			
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Mild
		Mesothelioma Malignant	
Peritoneum		Mesothelioma Malignant	
* Prostate		Mesothelioma Malignant	
* Seminal Vesicle		Mesothelioma Malignant	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 118	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900978
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Hyperplasia TGLS = 2,4-12+5 ]		Hyperplasia	Lymphoid, Focal, Marked
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant	
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 119

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900979

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Marked
		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-12 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-7 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Preputial Gland	Bilateral	Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 119	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 627
	<b>DOSE:</b> 1.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9900979

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 1-8+14 ]			
* Spleen		Fibrosis Leukemia Mononuclear	Mild
[ Fibrosis TGLS = 5-5 ]			
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Testes		Atrophy Hyperplasia	Moderate Mild
[ Atrophy TGLS = 3-8 ]	Interstit Cell		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH - Preputial Gland Bilateral Carcinoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 120

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900980

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Adenoma	
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
		[ Adenoma TGLS = 1-8 ]	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 121	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 340 <b>HISTO:</b> 9900981
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Islets, Pancreatic	* Lung
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lymph Node, Mesenteric
* Seminal Vesicle	* Spleen	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
		Pheochromocytoma Malignant	
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 122

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 583

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900982

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Testes
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Mild
* Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
* Lung		Alveolar/Bronchiolar Carcinoma	
		Infiltration Cellular	Histiocyte, Minimal
		[ Alveolar/Bronchiolar Carcinoma TGLS = 2-12 ]	
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 1-9 ]	
* Preputial Gland		Hyperplasia	Mild
* Stomach, Forestomach		Ulcer	Moderate
		[ Ulcer TGLS = 3-14 ]	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 123

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900983

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Mild
		Metaplasia	Squamous, Mild
	[ Inflammation TGLS = 3-4 ]		
Lymph Node	Bronchial	Ectasia	Moderate
	[ Ectasia TGLS = 4-12 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 123	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900983
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Chronic Active, Mild
* Spleen [ Hyperplasia TGLS = 5-5 ]		Hyperplasia Leukemia Mononuclear	Lymphoid, Focal, Moderate
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 124

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900984

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Metaplasia	Squamous, Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 124

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900984

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-8 ]

\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 125

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900985

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Leukemia Mononuclear TGLS = 3-5 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-2 ]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-8 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary GI			

Note: TGL 1, "mass, 80 x 60 x 40 mm, tan" noted at necropsy, involved subcutaneous tissue (skin).

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 125	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9900985
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
		Hyperplasia	Mild
* Pituitary Gland		Leukemia Mononuclear	
* Prostate		Adenoma	
		Hyperplasia	Mild
		Leukemia Mononuclear	
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 1-13 ]		
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 7-12 ]		
	[ Leukemia Mononuclear TGLS = 5-12 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-8 ]		
Tooth		Inflammation	Chronic Active, Mild
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 126

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 543

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900986

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
* Lung		Carcinoma	Metastatic (Pituitary Gland)
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-12 ]			
* Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 127

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 623

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9900987

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Testes
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Rectum	* Thyroid Gland
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Fatty Change	Marked
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
	Centrilobular	Necrosis	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Suppurative, Mild
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
Pleura		Inflammation	Suppurative, Marked
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 5-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 127

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 623

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9900987

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Pleura Inflammation

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 128

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900988

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**OBSERVATIONS**

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Infiltration Cellular	Plasma Cell, Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Keratoacanthoma	
		[ Keratoacanthoma TGLS = 1-14 ]	
* Spleen		Hyperplasia	Lymphoid, Focal, Moderate
		[ Hyperplasia TGLS = 3-12 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 2-8 ]	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth		Inflammation	Chronic Active, Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 128

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900988

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 129

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 617

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900989

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 130

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 586

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900990

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Marked
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Intestine Large, Colon		Parasite Metazoan	
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Minimal
		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
		[ Leukemia Mononuclear TGLS = 3-5 ]	
* Lung		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 130	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 586 <b>HISTO:</b> 9900990
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland	Pars Distalis	Hyperplasia Leukemia Mononuclear	Moderate
* Spleen		Fibrosis Leukemia Mononuclear	Mild
[ Leukemia Mononuclear TGLS = 2-12 ]			
* Stom Gland			
Note: TGL 4, "lesion, 2 mm diam" noted at trim, was not apparent microscopically.			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 131

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 619

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9900991

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**AUTO PRECLUDES DIAG.**

\* Intestine Small, Ileum

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
	Centrilobular	Necrosis	Moderate
Pleura		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 3-2+3 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Pleura Inflammation

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 132

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900992

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
Note: TGL 3, "deformity, diffuse" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 4-12 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 132

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900992

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 133

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900993

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
	[ Nephropathy TGLS = 5-6 ]		
* Liver	Bile Duct	Clear Cell Focus	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
		Mixed Cell Focus	
	[ Mixed Cell Focus TGLS = 6-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lym Node Mand			
		Note: TGL 3, "enlarged, 8x" noted at necropsy, actually involved salivary gland.	
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 7-9 ]		
* Salivary Glands		Sarcoma	
	[ Sarcoma TGLS = 1,3-14+12 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-5 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:55

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 133

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900993

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-8 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

Zymbals GI

Note: TGL 1, "mass, 20 x 20 x 15 mm" noted at necropsy, actually involved salivary gland.

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 134

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900994

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
[ Clear Cell Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 135

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900995

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-13 ]			
* Pancreas		Basophilic Focus	
* Spleen		Hyperplasia	Lymphoid, Focal, Moderate
[ Hyperplasia TGLS = 2-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 135

**TRT#:** 5  
**DOSE:** 1.0%

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 9900995

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-8 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 136

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900996

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-12 ]			
* Stomach, Forestomach		Ulcer	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 137

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900997

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 9-6 ]			
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Marked
[ Nephropathy TGLS = 5-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-12 ]			
[ Leukemia Mononuclear TGLS = 6-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary GI			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 137

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900997

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: TGL 7, "mass, 38 x 25 x 20 mm" noted at necropsy, involved subcutaneous tissues (skin).

* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin	Subcut Tiss	Keratoacanthoma	
		Sarcoma	
	[ Keratoacanthoma TGLS = 8-14 ]		
	[ Sarcoma TGLS = 7-15 ]		
* Spleen		Hyperplasia	Lymphoid, Focal, Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-12 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 138

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9900998

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
[ Hyperplasia TGLS = 2-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Carcinoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 139

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 718

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900999

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Sarcoma	Metastatic (Skin)
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
		Sarcoma	Metastatic (Skin)
		[ Leukemia Mononuclear TGLS = 3-5 ]	
* Lung		Leukemia Mononuclear	
		Sarcoma	Metastatic (Skin)
		[ Sarcoma TGLS = 5-4 ]	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary GI			
		Note: TGL 7, "mass, 75 x 60 x 48 mm" noted at necropsy, actually involved skin (subcutaneous).	
* Nose		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 139

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 718

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9900999

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland [ Carcinoma TGLS = 6-13 ]		Carcinoma	
* Skin	Subcut Tiss	Fibroma	
	Subcut Tiss	Keratoacanthoma	
		Sarcoma	
[ Fibroma TGLS = 7-15+16 ]			
[ Keratoacanthoma TGLS = 1-12 ]			
[ Sarcoma TGLS = 6-13+14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-8 ]			

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 140

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901000

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**INSUFFICIENT TISSUE**

\* Skin

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Mild
[ Clear Cell Focus TGLS = 3-5 ]			
[ Eosinophilic Focus TGLS = 4-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 140

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901000

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 141

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 674

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901001

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Stomach, Glandular	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Mild
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear Necrosis	Mild
* Kidney		Infarct	Mild
		Leukemia Mononuclear Lipoma Nephropathy	Moderate
[ Lipoma TGLS = 4-13 ]			
* Liver	Bile Duct	Hyperplasia Inflammation Inflammation Leukemia Mononuclear	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Mild
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Thrombosis	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 141

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 674

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901001

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland		Leukemia Mononuclear	
* Seminal Vesicle		Leukemia Mononuclear	
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 6-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Stomach, Forestomach		Ulcer	Mild
[ Ulcer TGLS = 5-9 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 142

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901002

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Gliosis	Mild
		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Marked
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Moderate
	[ Leukemia Mononuclear TGLS = 4-5 ]		
* Lung		Alveolar/Bronchiolar Carcinoma	
		Leukemia Mononuclear	
	[ Alveolar/Bronchiolar Carcinoma TGLS = 5-3 ]		
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 142	<b>TRT#:</b> 5 <b>DOSE:</b> 1.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9901002
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Mild
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	
* Prostate		Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
		Necrosis	Moderate
		[ Leukemia Mononuclear TGLS = 2-12 ]	
		[ Necrosis TGLS = 3-12 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 1-8 ]	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 143

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 562

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901003

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Hepatodiaphragmatic Nodule	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
	[ Hepatodiaphragmatic Nodule TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Stomach, Forestomach		Hyperplasia	Squamous, Diffuse, Mild
		Ulcer	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 144

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901004

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Clear Cell Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Prostate		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 145

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901005

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Cyst	Moderate
		Lipoma	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 3-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 145

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901005

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 146

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901006

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Degeneration	Cystic, Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Hyperplasia	Mild
Skeletal Muscle		Cyst	Squamous, Marked
[ Cyst TGLS = 2-12 ]			
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 146

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901006

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Tooth

Inflammation

Chronic Active, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 147

TRT#: 5

SEX: Male

DAY ON TEST: 649

DOSE: 1.0%

DISP: Moribund Sacrifice

HISTO: 9901007

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                   | * Brain                    | * Epididymis              | * Esophagus                 |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Mammary Gland             |
| * Parathyroid Gland      | * Preputial Gland          | * Prostate                | * Salivary Glands           |
| * Seminal Vesicle        | * Skin                     | * Stomach, Forestomach    | * Stomach, Glandular        |
| * Thymus                 | * Trachea                  | * Urinary Bladder         |                             |

OBSERVATIONS

- |                          |                                          |                       |                          |
|--------------------------|------------------------------------------|-----------------------|--------------------------|
| * Adrenal Cortex         |                                          | Hyperplasia           | Minimal                  |
| * Adrenal Medulla        |                                          | Leukemia Mononuclear  |                          |
| * Bone Marrow            |                                          | Leukemia Mononuclear  |                          |
| * Heart                  |                                          | Cardiomyopathy        | Moderate                 |
| * Kidney                 |                                          | Leukemia Mononuclear  |                          |
| * Liver                  |                                          | Nephropathy           | Mild                     |
|                          | Bile Duct                                | Degeneration          | Cystic, Mild             |
|                          |                                          | Hyperplasia           | Moderate                 |
|                          |                                          | Inflammation          | Histiocytic, Focal, Mild |
|                          | Centrilobular                            | Leukemia Mononuclear  |                          |
|                          | [ Leukemia Mononuclear TGLS = 3,4-5+12 ] | Necrosis              | Moderate                 |
| * Lung                   |                                          | Infiltration Cellular | Histiocyte, Minimal      |
|                          |                                          | Leukemia Mononuclear  |                          |
| Lymph Node               | Bronchial                                | Leukemia Mononuclear  |                          |
|                          | Mediastinal                              | Leukemia Mononuclear  |                          |
|                          | Renal                                    | Leukemia Mononuclear  |                          |
|                          | [ Leukemia Mononuclear TGLS = 5-15 ]     |                       |                          |
| * Lymph Node, Mandibular |                                          | Leukemia Mononuclear  |                          |
| * Lymph Node, Mesenteric |                                          | Leukemia Mononuclear  |                          |
| * Nose                   |                                          | Inflammation          | Suppurative, Mild        |
|                          |                                          | Thrombosis            | Minimal                  |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 147	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 649
	<b>DOSE:</b> 1.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9901007

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-13 ]		
* Stom Forestom			
	Note: TGL 6, "focus, 2 mm dia, dark" noted at trim, was not apparent microscopically.		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2-8 ]		
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 148

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901008

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

Eye	Retina	Atrophy	Marked
		Cataract	Marked
	[ Cataract TGLS = 1-13 ]		
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
		Cyst	Minimal
* Preputial Gland		Hyperplasia	Marked
	[ Hyperplasia TGLS = 3-8 ]		
* Prostate		Hyperplasia	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2,4-8 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 149

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 649

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901009

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Skin	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
[ Degeneration TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Deep Cervical	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 149

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 649

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901009

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Leukemia Mononuclear TGLS = 2-13 ]

* Pancreas	Leukemia Mononuclear	
* Pituitary Gland	Leukemia Mononuclear	
* Prostate	Inflammation	Chronic Active, Moderate
* Seminal Vesicle	Leukemia Mononuclear	
* Spleen	Leukemia Mononuclear	

[ Leukemia Mononuclear TGLS = 1-12 ]

* Stomach, Forestomach	Hyperplasia	Squamous, Mild
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[ Hyperplasia TGLS = 7-9 ]

* Stomach, Glandular	Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma

[ Adenoma TGLS = 3-8 ]

* Thymus	Leukemia Mononuclear	
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[ Leukemia Mononuclear TGLS = 4-2 ]

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 150

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901010

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Prostate		Inflammation	Chronic Active, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-12 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 150

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901010

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 1-8 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 151

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 484

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901011

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Rectum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Seminal Vesicle		

**OBSERVATIONS**

* Kidney [ Nephropathy TGLS = 3-6 ]		Nephropathy	Marked
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
[ Hepatodiaphragmatic Nodule TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Moderate
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 152

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 598

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901012

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thyroid Gland
* Trachea			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
[ Leukemia Mononuclear TGLS = 7-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Nose	Olfactory Epi	Degeneration	Moderate
		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 152	<b>TRT#:</b> 7 <b>DOSE:</b> 4.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 598 <b>HISTO:</b> 9901012
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Leukemia Mononuclear	
* Parathyroid Gland		Hyperplasia	Minimal
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4,8-12+13 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
[ Hyperplasia TGLS = 9-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Urinary Bladder		Leukemia Mononuclear	

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 153

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 586

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901013

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**INSUFFICIENT TISSUE**

\* Skin

**OBSERVATIONS**

* Intestine Small, Duodenum		Necrosis	Mild
* Intestine Small, Ileum		Necrosis	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
	[ Nephropathy TGLS = 2-6 ]		
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose		Thrombosis	Moderate
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate		Hyperplasia	Minimal
* Stomach, Forestomach		Ulcer	Mild
	[ Ulcer TGLS = 3-12 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-8 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 153

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 586

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901013

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 154

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 645

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901014

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Bone		Osteosarcoma	
[ Osteosarcoma TGLS = 3-12 ]			
* Heart		Mineralization	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 2,4-6+13 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Osteosarcoma	Metastatic (Bone)
* Nose	Olfactory Epi	Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Minimal
Skeletal Muscle		Mineralization	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH** - Bone Osteosarcoma

**CONTRIBUTORY CAUSE OF DEATH** - Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 155

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 619

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901015

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum
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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Minimal
* Parathyroid GI			
Note: TGL 4, "enlarged, 3x" noted at necropsy, was not apparent microscopically.			
* Stomach, Forestomach		Ulcer	Mild
[ Ulcer TGLS = 5-9 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid GI			
Note: TGL 3, "enlarged, 2x" noted at necropsy, was not apparent microscopically.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 155

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 619

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901015

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 156

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901016

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney	Transit Epithe	Hyperplasia Nephropathy	Minimal Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy Inflammation	Minimal Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Preputial Gland		Hyperplasia	Mild
[ Hyperplasia TGLS = 4-8 ]			
* Salivary Glands		Inflammation	Suppurative, Mild
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
* Testes	Interstit Cell	Adenoma Atrophy	Mild
[ Adenoma TGLS = 1-8 ]			
[ Atrophy TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 156

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901016

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 157

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 610

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901017

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

**MISSING**

* Adrenal Cortex	* Adrenal Medulla	* Heart	* Intestine Small, Duodenum
* Islets, Pancreatic	* Kidney	* Liver	* Pancreas
* Seminal Vesicle	* Spleen	* Thymus	

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lung
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**OBSERVATIONS**

* Nose	Olfactory Epi	Atrophy	Minimal
* Preputial Gland		Cyst	Moderate
* Salivary Glands		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 158

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 629

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901018

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Mild
		Hyperplasia	Mild
* Spleen		Fibrosis	Mild
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 159

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 596

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901019

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Lung
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Thymus
* Thyroid Gland	* Urinary Bladder		

**MISSING**

* Islets, Pancreatic	* Lymph Node, Mandibular	* Mammary Gland	* Pancreas
* Spleen			

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Stomach, Forestomach
* Stomach, Glandular	* Trachea		

**OBSERVATIONS**

* Epididymis		Granuloma Sperm	Mild
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
[ Inflammation TGLS = 2-5 ]			
* Nose		Inflammation	Suppurative, Moderate
Oral Mucosa	Pharyngeal	Squamous Cell Papilloma	
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Oral Mucosa Pharyngeal Squamous Cell Papilloma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 160

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901020

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Mineralization	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 161

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 613

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901021

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
[ Basophilic Focus TGLS = 3-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Moderate
* Stomach, Glandular		Cyst	Squamous, Moderate
		Necrosis	Minimal
Note: TGL 5, "discoloration, dark" noted at trim, was not apparent microscopically.			
[ Cyst TGLS = 4-9 ]			
* Testes	Interstit Cell	Adenoma	
		Atrophy	Moderate
[ Adenoma TGLS = 1-8 ]			
[ Atrophy TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH** - Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 161

**TRT#:** 7

**DOSE:** 4.0%

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 613

**HISTO:** 9901021

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 162

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 525

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901022

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Bone Marrow	* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Seminal Vesicle	* Trachea	

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus	
		Hepatocellular Adenoma	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
[ Hepatocellular Adenoma TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Moderate
* Stomach, Forestomach		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 163

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901023

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Squamous Cell Carcinoma	Metastatic (Oral Mucosa)
* Nose	Olfactory Epi	Atrophy	Minimal
Oral Mucosa	Pharyngeal	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-12 ]			
* Salivary Glands		Inflammation	Suppurative, Mild
* Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
		Ulcer	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 164

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 610

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901024

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
		Thrombosis	Moderate
* Salivary Glands		Inflammation	Suppurative, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 165

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 690

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901025

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 4-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
[ Fatty Change TGLS = 5-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary GI			
Note: TGL 1, "mass, 60 x 60 x 25 mm" noted at necropsy, actually involved skin (subcutis).			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14 ]			
* Spleen		Fibrosis	Moderate
[ Fibrosis TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 165

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 690

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901025

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-8 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 166

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 598

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901026

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-12 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
* Prostate		Hyperplasia	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 167

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 502

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901027

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Thrombosis	Mild
* Nose	Olfactory Epi	Atrophy	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Urin Bladder			

Note: TGL 2, "dilatation, red/brown" noted at necropsy, was not apparent microscopically.

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 168

**TRT#:** 7  
**DOSE:** 4.0%

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 484  
**HISTO:** 9901028

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Lymph Node, Mandibular	* Mammary Gland
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Intestine Large, Cecum	* Intestine Small, Ileum
* Thyroid Gland			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
Lymph Node	Mediastinal	Ectasia	Mild
[ Ectasia TGLS = 2-2 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
		Thrombosis	Moderate
* Pancreas		Atrophy	Minimal
* Stom Gland			
Note: TGL 3, "lesion, 1 mm dia, dark" noted at trim, was not apparent microscopically.			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 169

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 613

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901029

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Pancreas
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Mesothelioma Malignant	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 4-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 2-13 ]			
* Nose		Thrombosis	Marked
* Parathyroid Gland		Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 169

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 613

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901029

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hyperplasia TGLS = 6-2 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 3-5 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

Mesothelioma Malignant

[ Adenoma TGLS = 1-8 ]

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**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 170

**TRT#:** 7  
**DOSE:** 4.0%

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 532  
**HISTO:** 9901030

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Heart
* Lung	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Adrenal Medulla	* Bone Marrow	* Epididymis	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Pituitary Gland
* Seminal Vesicle	* Spleen	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex [ Carcinoma TGLS = 4-12 ]		Carcinoma
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma

**PRIMARY CAUSE OF DEATH**

- Adrenal Cortex Carcinoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 171

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901031

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
[ Hepatodiaphragmatic Nodule TGLS = 3-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Salivary Glands		Inflammation	Suppurative, Minimal
* Spleen		Hyperplasia	Lymphoid, Focal, Mild
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 5-13 ]			
* Stomach, Glandular		Necrosis	Moderate
[ Necrosis TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 171

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 564

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901031

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-8 ]

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**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 172

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 682

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901032

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Islets, Pancreatic		Carcinoma	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
[ Hepatodiaphragmatic Nodule TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 173

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 640

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901033

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Epididymis	* Esophagus
* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Thyroid Gland

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Inflammation	Histiocytic, Focal, Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Nose	Olfactory Epi	Degeneration	Moderate
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Angiectasis	Mild
[ Angiectasis TGLS = 3-9 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-12 ]			

Note: TGL 4, "focus, 1-2 mm, dark, multiple" noted at trim, was not apparent microscopically.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 173

**TRT#:** 7  
**DOSE:** 4.0%

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 640  
**HISTO:** 9901033

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes  
[ Adenoma TGLS = 2-8 ]

Bilateral, Interstit Cell

Adenoma

\* Thymus

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 174

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 449

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901034

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Angiectasis	Minimal
		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
[ Angiectasis TGLS = 2-5 ]			
[ Inflammation TGLS = 3-5 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 175

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 653

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901035

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
		Hypertrophy	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
[ Infarct TGLS = 8-6 ]			
[ Nephropathy TGLS = 6-6 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 9-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 175	<b>TRT#:</b> 7 <b>DOSE:</b> 4.0%	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 653 <b>HISTO:</b> 9901035
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose	Olfactory Epi	Degeneration Inflammation	Moderate Suppurative, Minimal
* Pancreas		Hyperplasia	Mild
* Parathyroid Gland		Hyperplasia	Minimal
* Preputial Gland		Cyst	Moderate
[ Cyst TGLS = 1-13 ]			
* Sem Ves			
Note: TGL 4, "small" seminal vesicles noted at necropsy, were within normal limits microscopically.			
* Spleen		Hyperplasia Leukemia Mononuclear	Lymphoid, Focal, Mild
[ Leukemia Mononuclear TGLS = 3-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 176

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 529

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901036

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Mild
* Salivary Glands		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 177

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901037

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	Minimal
		Hyperplasia	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Mild
* Pancreas		Hyperplasia	Suppurative, Mild
* Salivary Glands		Inflammation	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 178

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 565

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901038

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	Minimal
		Hyperplasia	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Histiocyte, Minimal
* Lung		Infiltration Cellular	
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
* Pancreas		Atrophy	Mild
		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 179

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 589

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901039

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
		Mineralization	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Stomach, Forestomach		Hyperplasia	Squamous, Diffuse, Minimal
		Ulcer	Mild
[ Ulcer TGLS = 3-12 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 180

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 431

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901040

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Thymsus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
		Mineralization	Mild
* Kidney		Mineralization	Moderate
		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Parathyroid Gland		Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Salivary Glands		Inflammation	Suppurative, Minimal
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
* Stomach, Glandular		Mineralization	Mild
		Necrosis	Mild
* Testes		Atrophy	Mild
[ Atrophy TGLS = 1-8 ]			

Tissue NOS

Note: TGL 4, "tissue NOS, nodule, 1 cm x .8 cm, dark" noted at trim, was a rounded lobe of liver.

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:55

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 180

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 431

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901040

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**CONTRIBUTORY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 181

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901041

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

Eye	Retina	Atrophy Cataract	Moderate Mild
[ Cataract TGLS = 5-12 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia Nephropathy	Minimal Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus Clear Cell Focus	
	Bile Duct	Hyperplasia Inflammation Inflammation	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Moderate
[ Basophilic Focus TGLS = 4-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
* Nose	Olfactory Epi	Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Stomach, Forestomach		Ulcer	Marked
[ Ulcer TGLS = 6-13 ]			
* Stomach, Glandular		Necrosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 181

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901041

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 1-8 ]

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 182

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 438

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901042

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Lung		Alveolar/Bronchiolar Adenoma	
		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Ectasia	Marked
[ Ectasia TGLS = 2-14 ]			
* Nose	Olfactory Epi	Degeneration	Mild
* Pancreas		Atrophy	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 1-12+13 ]			

**PRIMARY CAUSE OF DEATH**

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 183

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 631

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901043

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Small, Duodenum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum
* Intestine Small, Jejunum			

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Nose	Olfactory Epi	Atrophy	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 184

TRT#: 7

SEX: Male

DAY ON TEST: 564

DOSE: 4.0%

DISP: Moribund Sacrifice

HISTO: 9901044

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Nose	* Pancreas
Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	Spinal Cord
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Mandibular	* Mammary Gland
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
[ Cardiomyopathy TGLS = 3-5 ]			
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 5-5 ]			
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver	Bile Duct	Basophilic Focus	Minimal
		Hyperplasia	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	
Note: TGL 4, "nodule, 3 mm dia" noted at trim, was variation in normal lobar morphology.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Parathyroid Gland		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 185

TRT#: 7

SEX: Male

DAY ON TEST: 578

DOSE: 4.0%

DISP: Natural Death

HISTO: 9901045

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Small, Duodenum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum
* Intestine Small, Jejunum			

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 5-6 ]			
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Mild
Note: TGL 3, "deformity, 2 x 2 x 1 mm" noted at necropsy, was not apparent microscopically.			
[ Inflammation TGLS = 4-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Thrombosis	Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Salivary Glands		Inflammation	Suppurative, Mild
* Stomach, Forestomach		Ulcer	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Urin Bladder			

Note: TGL 1, "dilatation, 15 mm dia, red" noted at necropsy, was not apparent microscopically.

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 185

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 578

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901045

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 186

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 647

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901046

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Ulcer	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Hyperplasia	Mild
* Salivary Glands		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 187

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 398

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901047

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Colon
* Intestine Large, Rectum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Thymus	* Thyroid Gland
* Trachea			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

Blood Vessel	Aorta	Mineralization	Marked
* Heart		Mineralization	Mild
* Kidney		Hydronephrosis	Mild
		Mineralization	Moderate
		Nephropathy	Marked
[ Hydronephrosis TGLS = 4-6 ]			
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Moderate
[ Fatty Change TGLS = 1-5 ]		Mixed Cell Focus	
* Lung		Mineralization	Moderate
		Thrombosis	Mild
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 187	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 398
	<b>DOSE:</b> 4.0%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9901047

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Stomach, Glandular		Mineralization	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
* Urinary Bladder		Mineralization	Moderate
		Necrosis	Mild

[ Necrosis TGLS = 2-9 ]

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**PRIMARY CAUSE OF DEATH** - Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 188

TRT#: 7

SEX: Male

DAY ON TEST: 554

DOSE: 4.0%

DISP: Natural Death

HISTO: 9901048

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                            |                          |
|---------------------------|-----------------------------|----------------------------|--------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | * Bone                     | * Bone Marrow            |
| * Brain                   | * Epididymis                | * Esophagus                | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic     |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Pancreas                 | * Parathyroid Gland      |
| * Pituitary Gland         | * Preputial Gland           | * Prostate                 | * Salivary Glands        |
| * Seminal Vesicle         | Skeletal Muscle             | * Skin                     | * Spleen                 |
| * Stomach, Glandular      | * Thymus                    | * Thyroid Gland            | * Trachea                |
| * Urinary Bladder         |                             |                            |                          |

MISSING

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- \* Intestine Large, Cecum
- \* Intestine Small, Ileum

OBSERVATIONS

- |                                            |                           |                            |                                |
|--------------------------------------------|---------------------------|----------------------------|--------------------------------|
| * Heart                                    |                           | Cardiomyopathy             | Mild                           |
| * Kidney                                   |                           | Nephropathy                | Marked                         |
| [ Nephropathy TGLS = 1-6 ]                 |                           |                            |                                |
| * Liver                                    |                           | Basophilic Focus           |                                |
|                                            |                           | Hepatodiaphragmatic Nodule |                                |
|                                            | Bile Duct                 | Hyperplasia                | Minimal                        |
|                                            |                           | Inflammation               | Granulomatous, Focal, Moderate |
|                                            |                           | Inflammation               | Histiocytic, Focal, Moderate   |
| [ Hepatodiaphragmatic Nodule TGLS = 3-12 ] |                           |                            |                                |
| * Lung                                     |                           | Infiltration Cellular      | Histiocyte, Minimal            |
| * Nose                                     | Olfactory Epi             | Atrophy                    | Minimal                        |
|                                            |                           | Thrombosis                 | Mild                           |
| * Stomach, Forestomach                     |                           | Cyst                       | Minimal                        |
| * Testes                                   | Bilateral, Interstit Cell | Adenoma                    |                                |
| [ Adenoma TGLS = 2-8 ]                     |                           |                            |                                |

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 189

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 543

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901049

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney [ Nephropathy TGLS = 3-6 ]		Nephropathy	Marked
* Liver [ Inflammation TGLS = 2-5 ]	Bile Duct	Basophilic Focus Hyperplasia Inflammation Inflammation	Minimal Histiocytic, Focal, Moderate Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Salivary Glands		Inflammation	Suppurative, Minimal
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 190

TRT#: 7

SEX: Male

DAY ON TEST: 507

DOSE: 4.0%

DISP: Moribund Sacrifice

HISTO: 9901050

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver	Bile Duct	Basophilic Focus Hyperplasia Inflammation Inflammation	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Moderate
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Atrophy	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:55

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 191

TRT#: 7

SEX: Male

DAY ON TEST: 627

DOSE: 4.0%

DISP: Moribund Sacrifice

HISTO: 9901051

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Spleen	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Mandibular	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-12 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Salivary Glands		Inflammation	Suppurative, Minimal
* Skin	Subcut Tiss	Hemorrhage	Moderate
Note: TGL 3, "nodule, 3 x 5 mm, black" seen at trim, was a hematoma.			
[ Hemorrhage TGLS = 3-13 ]			
* Stomach, Forestomach		Ulcer	Mild
[ Ulcer TGLS = 4-14 ]			
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 191

**TRT#:** 7  
**DOSE:** 4.0%

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 627  
**HISTO:** 9901051

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-8 ]	Interstit Cell	Hyperplasia	Mild
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**PRIMARY CAUSE OF DEATH** - Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 192

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 617

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901052

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Parathyroid Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Marked
	[ Nephropathy TGLS = 2-6 ]		
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Alveolar/Bronchiolar Carcinoma	
	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
	[ Alveolar/Bronchiolar Carcinoma TGLS = 3-12 ]		
* Nose	Olfactory Epi	Atrophy	Mild
		Inflammation	Suppurative, Minimal
	Olfactory Epi	Metaplasia	Mild
		Thrombosis	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 192

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 617

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901052

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Salivary Glands

Inflammation

Suppurative, Minimal

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 1-8 ]

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 193

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 624

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901053

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Kidney [ Nephropathy TGLS = 1-6 ]		Nephropathy	Marked
* Liver [ Basophilic Focus TGLS = 4-12 ]	Bile Duct	Basophilic Focus Hyperplasia Inflammation Inflammation	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Mild
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Hyperplasia	Mild
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Salivary Glands		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 3-8 ]	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 194

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 673

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901054

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 1-6 ]			
* Liver		Angiectasis	Mild
		Basophilic Focus	
		Degeneration	Cystic, Mild
		Inflammation	Histiocytic, Focal, Mild
		Mixed Cell Focus	
[ Angiectasis TGLS = 4-12 ]			
[ Mixed Cell Focus TGLS = 4-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Hemorrhage	Minimal
[ Hemorrhage TGLS = 2-2 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
* Pancreas		Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Salivary Glands		Inflammation	Suppurative, Mild
* Stomach, Forestomach		Hyperplasia	Basal Cell, Mild
		Ulcer	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:55  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 194	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 4.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9901054

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 5-13 ]			
* Stomach, Glandular		Necrosis	Moderate
[ Necrosis TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
PRIMARY CAUSE OF DEATH	- Kidney Nephropathy		
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 195

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 484

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901055

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

\* Intestine Large, Cecum                      \* Intestine Large, Colon

**OBSERVATIONS**

* Heart		Mineralization	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 4-6 ]			
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
[ Inflammation TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 196

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 574

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901056

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
[ Fatty Change TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
		Thrombosis	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Moderate

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 197

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 584

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901057

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Kidney [ Nephropathy TGLS = 2-6 ]		Nephropathy	Marked
* Liver	Bile Duct	Basophilic Focus Hyperplasia Inflammation Inflammation Infiltration Cellular	Minimal Histiocytic, Focal, Moderate Granulomatous, Focal, Minimal Histiocyte, Minimal
* Lung Lymph Node	Mediastinal	Inflammation	Granulomatous, Moderate
* Nose	Olfactory Epi	Atrophy	Minimal
* Prostate		Hyperplasia	Minimal
* Salivary Glands		Inflammation	Suppurative, Minimal
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
* Testes [ Adenoma TGLS = 1-8 ]	Bilateral, Interstit Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 198

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 408

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901058

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Epididymis	* Esophagus	* Islets, Pancreatic
* Parathyroid Gland	* Preputial Gland	* Prostate	* Skin
* Thyroid Gland	* Trachea		

**MISSING**

* Lymph Node, Mandibular	* Mammary Gland
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**INSUFFICIENT TISSUE**

\* Intestine Large, Rectum

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
		Necrosis	Marked
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart	Valve	Inflammation	Acute, Mild
		Leukemia Mononuclear	
Note: There were bacteria in the inflammatory foci.			
* Intestine Large, Cecum		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 6-7 ]	
* Intestine Large, Colon		Leukemia Mononuclear	
* Intestine Small, Duodenum		Leukemia Mononuclear	
* Intestine Small, Ileum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
Note: Bacterial emboli were in several glomeruli.			
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Inflammation	Histiocytic, Focal, Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 198

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 408

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901058

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Hepatodiaphragmatic Nodule TGLS = 3-5 ]

* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-13 ]		
* Nose		Thrombosis	Moderate
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Salivary Glands		Leukemia Mononuclear	
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-5 ]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-9 ]		
* Testes		Leukemia Mononuclear	
	Note: Clumps of bacteria were present in the testes.		
	[ Leukemia Mononuclear TGLS = 2-8 ]		
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 199

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 561

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901059

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	Tissue NOS
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Mild
* Prostate		Hyperplasia	Minimal
* Salivary Glands		Inflammation	Suppurative, Moderate
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			
Tissue NOS			

Note: TGL 3, "mass, 9 x 7 x 5 mm, dark red" noted at necropsy, was a lymph node with some blood in the sinuses.

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 199

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 561

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901059

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 200

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 483

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901060

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Mineralization	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Moderate
		Inflammation	Granulomatous, Focal, Minimal
[ Inflammation TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose		Thrombosis	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-8 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 201

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 9901061

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Infarct	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tooth		Inflammation	Chronic Active, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 202

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901062

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
	[ Basophilic Focus TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
		Galactocele	Mild
	[ Carcinoma TGLS = 1-12 ]		
	[ Galactocele TGLS = 4-13 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Minimal
		Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 202

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901062

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 203

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901063

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

**MISSING**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral GI			
Note: TGL 2, "enlarged, 2x, yellow" noted at necropsy, was normal duct filled with secretion.			
* Heart		Leukemia Mononuclear	
* Intestine Large, Colon		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
[ Basophilic Focus TGLS = 4-5 ]			
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8,9,10-13+12+4 ]			
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 203

TRT#: 2

DOSE: 0.0%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 9901063

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-7 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,12,13,14-16+15+18+17 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 6-9 ]			
[ Leukemia Mononuclear TGLS = 7-9 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Tooth		Inflammation	Chronic Active, Moderate
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 204

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901064

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	Lacrimal Gland	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
Lacrimal GI			
Note: TGL 3, "enlarged, 2x, dark" noted at necropsy, was within normal limits microscopically.			
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Adenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thymus		Thymoma Benign	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 205

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901065

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Trachea	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Thrombosis	Mild
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear Nephropathy	Minimal
* Liver		Basophilic Focus Fatty Change Inflammation Leukemia Mononuclear Necrosis	Mild Histiocytic, Focal, Minimal Minimal
	Centrilobular		
	[ Leukemia Mononuclear TGLS = 4-5 ]		
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,5-13+12 ]		
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 2-14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 205

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901065

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland	Pars Distalis	Leukemia Mononuclear Adenoma	
* Spleen		Leukemia Mononuclear Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Stomach, Glandular		Leukemia Mononuclear	
* Thyroid Gland	Bilateral, C Cell	Adenoma	
Tooth		Inflammation	Chronic Active, Mild
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 206

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 9901066

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	Multiple
[ Carcinoma TGLS = 4-15 ]			
[ Fibroadenoma TGLS = 1,2,6-12+13+16 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 207

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901067

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	Lymph Node	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Clitoral Gland [ Carcinoma TGLS = 1-8 ]		Carcinoma	
* Heart		Cardiomyopathy	Minimal
* Kidney [ Infarct TGLS = 3-6 ]		Infarct	Moderate
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung Lymph Node Note: TGL 4, "mediastinal, enlarged, 3x, dark" noted at necropsy, was not apparent microscopically.		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 2,6-12+13 ]		Fibroadenoma	Multiple
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Minimal
* Pituitary Gland [ Hyperplasia TGLS = 5-9 ]	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 208

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 540  
**HISTO:** 9901068

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

\* Intestine Small, Ileum                      \* Intestine Small, Jejunum

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
	Centrilobular	Necrosis	Minimal
Note: TGL 3, "mass, 7 x 5 x 5 mm, white" noted at necropsy, was not apparent microscopically. [ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Sarcoma	Metastatic (Ovary)
Mesentery		Sarcoma	Metastatic (Ovary)
[ Sarcoma TGLS = 5,7-12+13 ]			
* Ovary		Sarcoma	
[ Sarcoma TGLS = 4-15+16 ]			
* Pancreas		Sarcoma	Metastatic (Ovary)
[ Sarcoma TGLS = 6-14 ]			
* Saliv Glands			
Note: TGL 8, "small" noted at necropsy, was not apparent microscopically.			
* Spleen		Hematopoietic Cell Proliferation	Marked
		Sarcoma	Metastatic (Ovary)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 208

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 540  
**HISTO:** 9901068

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**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Hematopoietic Cell Proliferation TGLS = 1-5 ]

\* Uterus

Sarcoma

Metastatic (Ovary)

---

PRIMARY CAUSE OF DEATH

- Ovary Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 209

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 697  
**HISTO:** 9901069

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		[ Basophilic Focus TGLS = 3-5 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 4-15 ]	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
		[ Fibroadenoma TGLS = 1,2-13+16+17 ]	
Mesentery	Fat	Necrosis	Mild
		[ Necrosis TGLS = 6-12 ]	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 5-9 ]	
* Stomach, Forestomach		Foreign Body	
		Inflammation	Granulomatous, Minimal
		[ Inflammation TGLS = 7-14 ]	
* Thyroid Gland	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 209

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 697

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901069

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 210

TRT#: 2

SEX: Female

DAY ON TEST: 724

DOSE: 0.0%

DISP: Natural Death

HISTO: 9901070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex  
\* Clitoral Gland  
\* Salivary Glands

\* Adrenal Medulla  
\* Esophagus  
\* Skin

\* Bone  
\* Ovary  
\* Thymus

\* Brain  
\* Parathyroid Gland  
\* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

\* Bone Marrow  
\* Intestine Small, Duodenum  
\* Lymph Node, Mesenteric  
\* Thyroid Gland

\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Pancreas  
\* Trachea

\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Pituitary Gland

\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Spleen

OBSERVATIONS

\* Heart  
\* Kidney  
    [ Infarct TGLS = 7-6 ]  
\* Liver  
    [ Necrosis TGLS = 4-5 ]  
\* Lung  
    Lymph Node  
    [ Hemorrhage TGLS = 6-2 ]  
\* Mammary Gland  
    [ Fibroadenoma TGLS = 2,3,12-14+15+12+19 ]  
Mesentery  
    [ Necrosis TGLS = 5-13 ]

Centrilobular  
Mediastinal  
Fat  
Respirat Epith

Cardiomyopathy  
Infarct  
Basophilic Focus  
Fatty Change  
Necrosis  
Infiltration Cellular  
Hemorrhage  
Fibroadenoma  
Necrosis  
Accumulation, Hyaline Droplet  
Inflammation

Mild  
Mild  
Moderate  
Moderate  
Histiocyte, Minimal  
Mild  
Multiple  
Mild  
Mild  
Suppurative, Minimal

Note: TGL 1, "enlarged, 4x" noted at necropsy, was not apparent microscopically, and may have been obscured by post mortem autolysis.

\* Spleen

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 210

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 724  
**HISTO:** 9901070

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: TGL 8, "nodule, 3 x 2 mm, dark" noted at trim, was not apparent microscopically.

* Stomach, Forestomach [ Hyperplasia TGLS = 10-17 ]	Hyperplasia	Squamous, Mild
* Stomach, Glandular [ Necrosis TGLS = 11-18 ]	Necrosis	Mild
* Uterus [ Polyp Stromal TGLS = 9-9 ]	Polyp Stromal	

**PRIMARY CAUSE OF DEATH** - Liver Centrilobular Necrosis

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 211

TRT#: 2

SEX: Female

DAY ON TEST: 659

DOSE: 0.0%

DISP: Natural Death

HISTO: 9901071

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla  
\* Esophagus  
\* Ovary  
\* Trachea

\* Bone  
\* Intestine Large, Colon  
\* Skin  
\* Urinary Bladder

\* Bone Marrow  
\* Intestine Large, Rectum  
\* Stomach, Forestomach  
\* Uterus

\* Brain  
\* Lymph Node, Mesenteric  
\* Thymus

MISSING

\* Clitoral Gland  
\* Thyroid Gland

\* Lymph Node, Mandibular

\* Parathyroid Gland

\* Salivary Glands

AUTO PRECLUDES DIAG.

\* Intestine Large, Cecum  
\* Islets, Pancreatic  
\* Spleen

\* Intestine Small, Duodenum  
\* Kidney  
\* Stomach, Glandular

\* Intestine Small, Ileum  
\* Nose

\* Intestine Small, Jejunum  
\* Pancreas

OBSERVATIONS

\* Adrenal Cortex  
\* Heart  
\* Liver

Hypertrophy  
Cardiomyopathy  
Basophilic Focus  
Inflammation  
Inflammation  
Infiltration Cellular  
Fibroadenoma  
Galactocele

Moderate  
Mild  
Histiocytic, Focal, Minimal  
Granulomatous, Focal, Minimal  
Histiocyte, Minimal  
Marked

\* Lung  
\* Mammary Gland

[ Fibroadenoma TGLS = 2-13 ]  
[ Galactocele TGLS = 1-12 ]

Mesentery  
[ Necrosis TGLS = 4-14 ]

Fat

Necrosis

Mild

\* Pituitary Gland  
[ Adenoma TGLS = 3-9 ]

Pars Distalis

Adenoma

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 212

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901072

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Minimal
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-5 ]	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
		[ Fibroadenoma TGLS = 4-13 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 212	<b>TRT#:</b> 2 <b>DOSE:</b> 0.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 731 <b>HISTO:</b> 9901072
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Basophilic Focus	
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 3-12 ]		Hemorrhage Leukemia Mononuclear	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 213

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901073

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	Lymph Node	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
[ Basophilic Focus TGLS = 1-5+12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
Note: TGL 2, "mediastinal, enlarged, 3 x 5 mm, dark" noted at trim, was within normal limits microscopically.			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 214

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901074

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 4-5+12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
[ Hyperplasia TGLS = 6-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 214	<b>TRT#:</b> 2 <b>DOSE:</b> 0.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 731 <b>HISTO:</b> 9901074
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Hyperplasia	Mild
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PRIMARY CAUSE OF DEATH	-		
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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 215

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 413

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901075

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
[ Hyperplasia TGLS = 2-12 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 216

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901076

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
		Degeneration	Cystic, Mild
* Clitoral Gland		Adenoma	
		Carcinoma	
[ Carcinoma TGLS = 1-8 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Mild
		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 216

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901076

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 217

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 247

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901077

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney		Inflammation Nephropathy	Suppurative, Marked Moderate
[ Inflammation TGLS = 2-13+15 ]			
* Liver		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular Thrombosis	Histiocyte, Minimal Mild
Lymph Node	Iliac	Inflammation	Suppurative, Marked
[ Inflammation TGLS = 1-12 ]			
* Mammary Gland		Fibroadenoma	
* Spleen		Hematopoietic Cell Proliferation	Marked
* Stomach, Forestomach		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 3-14 ]			
Tooth		Inflammation	Chronic Active, Moderate
Ureter		Inflammation	Suppurative, Marked
[ Inflammation TGLS = 1-12 ]			

**PRIMARY CAUSE OF DEATH**

- Kidney Inflammation

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 218

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901078

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 1-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 219

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 697  
**HISTO:** 9901079

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 220

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901080

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Adrenal Cortex		Degeneration	Cystic, Mild
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 221

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901081

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,6-12+13+15 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 222

TRT#: 2

DOSE: 0.0%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 9901082

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 3-12 ]			
* Kidney	Renal Tubule	Hypertrophy	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
[ Basophilic Focus TGLS = 5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	Multiple
[ Carcinoma TGLS = 2-17+18 ]			
[ Fibroadenoma TGLS = 1,8-15+16+19 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4,7-13+14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 222

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901082

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 223

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 9901083

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Parathyroid Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-12 ]			
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	
* Salivary Glands		Atrophy	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 223

**TRT#:** 2

**DOSE:** 0.0%

**SEX:** Female

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729

**HISTO:** 9901083

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 224

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 596  
**HISTO:** 9901084

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Fatty Change	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Ovary		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
		Necrosis	Mild
[ Leukemia Mononuclear TGLS = 1-12 ]			
[ Necrosis TGLS = 2-12 ]			
* Stomach, Glandular		Mineralization	Minimal
		Necrosis	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 224

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 596  
**HISTO:** 9901084

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 4-9+13 ]

* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Leukemia Mononuclear	

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 225

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901085

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Mild
[ Cyst TGLS = 2-8 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Thrombosis	Moderate
[ Thrombosis TGLS = 5-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 226

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901086

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,4-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 227

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 624  
**HISTO:** 9901087

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**AUTO PRECLUDES DIAG.**

* Intestine Small, Ileum	* Thyroid Gland
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**OBSERVATIONS**

* Bone		Inflammation	Chronic Active, Marked
[ Inflammation TGLS = 5-11 ]			
* Brain		Inflammation	Suppurative, Mild
[ Inflammation TGLS = 4-1 ]			
Eye	Retina	Atrophy	Marked
		Cataract	Moderate
	Cornea	Inflammation	Suppurative, Marked
[ Inflammation TGLS = 1-13 ]			
Harderian Gland		Inflammation	Suppurative, Moderate
* Liver		Basophilic Focus	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-12 ]			
* Nose		Inflammation	Suppurative, Mild
Skeletal Muscle		Inflammation	Suppurative, Marked
[ Inflammation TGLS = 3-14 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stom Gland			
Note: TGL 6, "focus, 1-2 mm, dark, multiple" noted at trim, was not apparent microscopically.			
* Stomach, Forestomach		Ulcer	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 227

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 624  
**HISTO:** 9901087

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Tooth	Inflammation	Chronic Active, Mild
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PRIMARY CAUSE OF DEATH	- Eye Cornea Inflammation
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 228

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901088

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Clitoral Gland		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Mild
		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 229

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 626  
**HISTO:** 9901089

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Clitoral Gland	Bilateral	Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Centrilobular	Inflammation	Histiocytic, Focal, Minimal
		Necrosis	Minimal
[ Basophilic Focus TGLS = 4-5 ]			
[ Necrosis TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
* Spleen		Hematopoietic Cell Proliferation	Marked
[ Hematopoietic Cell Proliferation TGLS = 2-5 ]			
* Thyroid Gland	C Cell	Adenoma	
Tooth		Inflammation	Chronic Active, Moderate

**PRIMARY CAUSE OF DEATH** - Clitoral Gland Bilateral Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 230

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901090

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
Eye	Retina	Atrophy	Marked
		Cataract	Marked
	[ Cataract TGLS = 1-14 ]		
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
		Leukemia Mononuclear	
	[ Basophilic Focus TGLS = 5-5 ]		
	[ Hepatodiaphragmatic Nodule TGLS = 8-5 ]		
* Lung	Alveolar Epith	Hyperplasia	Marked
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 230	<b>TRT#:</b> 2 <b>DOSE:</b> 0.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 9901090
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Lymph Node [ Leukemia Mononuclear TGLS = 6-12 ]	Deep Cervical	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 2-13 ]		Fibroadenoma	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland [ Hyperplasia TGLS = 7-9 ]	Pars Distalis	Hyperplasia	Moderate
* Spleen [ Leukemia Mononuclear TGLS = 4-5 ]		Leukemia Mononuclear	
* Uterus [ Hyperplasia TGLS = 3-9 ]		Hyperplasia	Cystic, Marked

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 231

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 702  
**HISTO:** 9901091

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 2-13 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Bronchiole	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Granulomatous, Moderate
Lymph Node	Pancreatic		
[ Inflammation TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Adrenal Medulla Pheochromocytoma Malignant

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 232

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: 0.0%

DISP: Terminal Sacrifice

HISTO: 9901092

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-12 ]			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 232

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901092

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 233

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901093

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Degeneration	Cystic, Mild
		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 234

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901094

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 3-5 ]		
	[ Clear Cell Focus TGLS = 3-5 ]		
* Lung		Alveolar/Bronchiolar Carcinoma	
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-4 ]		
* Mammary Gland			
	Note: TGL 1, "mass, 5- x 35 x 30 mm, white" noted at necropsy, involved subcutaneous tissue (skin).		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-9 ]		
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 1-12 ]		
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 234

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901094

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 235

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 543

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9901095

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Intestine Large, Colon
* Intestine Large, Rectum	* Mammary Gland	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Urinary Bladder
* Uterus			

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Pancreas	* Pituitary Gland	* Thyroid Gland
* Trachea			

**OBSERVATIONS**

* Clitoral Gland		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Ovary		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	

**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 236

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901096

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-8 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
* Uterus		Hydrometra	Marked
		Sarcoma Stromal	
[ Hydrometra TGLS = 2-12 ]			
[ Sarcoma Stromal TGLS = 1-13 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 237

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 697

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 991097

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	Lymph Node	* Lymph Node, Mesenteric
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 4-14 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
Note: TGL 2, "enlarged, 4x" noted at necropsy, was within normal limits microscopically.			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
[ Hyperplasia TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 238

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 527  
**HISTO:** 9901098

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
[ Inflammation TGLS = 2-4 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 239

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901099

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Degeneration Hyperplasia	Cystic, Mild Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus Inflammation Inflammation	Granulomatous, Focal, Mild Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular Inflammation	Minimal Histiocyte, Minimal Chronic Active, Minimal
[ Inflammation TGLS = 2-4 ]			
Lymph Node	Mediastinal	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-2 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,5-14+15 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 7-16 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Stomach, Forestomach		Squamous Cell Papilloma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 239

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901099

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Squamous Cell Papilloma TGLS = 6-13 ]

\* Thyroid Gland  
Tongue

C Cell

Hyperplasia  
Squamous Cell Carcinoma

Mild

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[ Squamous Cell Carcinoma TGLS = 4-12 ]

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 240

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 697

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901100

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Trachea
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone		Osteopetrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Inflammation	Chronic Active, Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	[ Leukemia Mononuclear TGLS = 6-6 ]		
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
	[ Fatty Change TGLS = 4-16+5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-2 ]		
	[ Leukemia Mononuclear TGLS = 8-13 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 240	<b>TRT#:</b> 2 <b>DOSE:</b> 0.0%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 697 <b>HISTO:</b> 9901100
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mesenteric [ Leukemia Mononuclear TGLS = 7-18+7 ]		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 1-14+15 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 5-12 ]	Fat	Necrosis	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet Inflammation	Minimal Suppurative, Mild
* Pituitary Gland [ Adenoma TGLS = 9-9 ]	Pars Distalis	Adenoma Leukemia Mononuclear	
* Spleen [ Leukemia Mononuclear TGLS = 2-17 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 241

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901101

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex [ Degeneration TGLS = 3-6 ]		Degeneration	Cystic, Marked
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney [ Nephropathy TGLS = 2-6 ]		Nephropathy	Moderate
* Liver [ Basophilic Focus TGLS = 5-5 ]		Basophilic Focus Inflammation Inflammation	Granulomatous, Focal, Mild Histiocytic, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-13 ] [ Galactocele TGLS = 7-12 ]		Fibroadenoma Galactocele	Moderate
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland [ Adenoma TGLS = 6-9 ]	Pars Distalis	Adenoma	
* Salivary Glands		Atrophy	Mild
* Thyroid Gland	C Cell Follicular Cel	Adenoma Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 241

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901101

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 4-2 ]

\* Uterus

Polyp Stromal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 242

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901102

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Inflammation	Chronic Active, Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 3-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,4-12+13 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Mild
* Ovary		Cyst	Mild
	[ Cyst TGLS = 2-8 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 243

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 626

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901103

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Hyperplasia	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 4-14 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
[ Hyperplasia TGLS = 3-4 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 244

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 696  
**HISTO:** 9901104

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-5 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Mild
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 244

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 696  
**HISTO:** 9901104

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-12 ]

\* Thymus

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 245

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 728

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9901105

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 1-6 ]			
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 246

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901106

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,4-13+14+15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Carcinoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 5-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 247

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 542

**DOSE:** 0.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901107

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Int Lg Cecum			
Note: TGL 3, "lesion, 2 x 4 mm, pink" noted at trim, was normal Peyer's patch.			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Mild
* Mammary Gland		Carcinoma	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
[ Cyst TGLS = 1-12 ]			
* Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 2-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
[ Hyperplasia TGLS = 4-14 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 248

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901108

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral GI			
Note: TGL 2, "focus, 2 x 2 mm, dark" noted at necropsy, was normal duct filled with secretion.			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 3,4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Note: TGL 6, "focus, 3 mm dia, dark" noted at trim, was not apparent microscopically.			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 249

**TRT#:** 2  
**DOSE:** 0.0%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901109

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
		Hyperplasia	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal

Note: TGL 4, "deformity, 6 x 5 x 4 mm" noted at necropsy, was variation in normal lobar morphology.

[ Basophilic Focus TGLS = 3-5 ]

* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Fibroadenoma	
Mesentery	Fat	Necrosis	Moderate
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 250

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 709

**DOSE:** 0.0%

**DISP:** Natural Death

**HISTO:** 9901110

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Small, Duodenum	* Islets, Pancreatic	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Moderate
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
* Liver		Fatty Change	Mild
		Leukemia Mononuclear Necrosis	Moderate
	Centrilobular		
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2,3-12+13+14 ]			
* Nose		Inflammation Thrombosis	Suppurative, Mild Minimal
* Ovary		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 250	<b>TRT#:</b> 2 <b>DOSE:</b> 0.0%	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 709 <b>HISTO:</b> 9901110
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 4,8-15 ]	Leukemia Mononuclear	
* Stomach, Forestomach [ Ulcer TGLS = 10-16 ]	Ulcer	Moderate
* Stomach, Glandular [ Necrosis TGLS = 9-17 ]	Necrosis	Moderate
* Thymus	Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 251

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901111

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 3-14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-13 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 1-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 251

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901111

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 252

TRT#: 4

SEX: Female

DAY ON TEST: 435

DOSE: 0.25%

DISP: Natural Death

HISTO: 9901112

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                      |                      |                     |
|---------------------------|----------------------|----------------------|---------------------|
| * Bone                    | * Brain              | * Esophagus          | * Heart             |
| * Intestine Large, Rectum | * Islets, Pancreatic | * Mammary Gland      | * Parathyroid Gland |
| * Salivary Glands         | * Skin               | * Stomach, Glandular | * Thyroid Gland     |
| * Trachea                 | * Urinary Bladder    |                      |                     |

MISSING

- |                  |                          |
|------------------|--------------------------|
| * Clitoral Gland | * Lymph Node, Mandibular |
|------------------|--------------------------|

AUTO PRECLUDES DIAG.

- \* Intestine Small, Ileum

OBSERVATIONS

- |                             |                                      |                       |                     |
|-----------------------------|--------------------------------------|-----------------------|---------------------|
| * Adrenal Cortex            |                                      | Leukemia Mononuclear  |                     |
| * Adrenal Medulla           |                                      | Leukemia Mononuclear  |                     |
| * Bone Marrow               |                                      | Leukemia Mononuclear  |                     |
| * Intestine Large, Cecum    |                                      | Leukemia Mononuclear  |                     |
| * Intestine Large, Colon    |                                      | Leukemia Mononuclear  |                     |
| * Intestine Small, Duodenum |                                      | Leukemia Mononuclear  |                     |
| * Intestine Small, Jejunum  |                                      | Leukemia Mononuclear  |                     |
| * Kidney                    |                                      | Infarct               | Mild                |
|                             |                                      | Leukemia Mononuclear  |                     |
|                             |                                      | Nephropathy           | Mild                |
| * Liver                     |                                      | Basophilic Focus      |                     |
|                             |                                      | Fatty Change          | Moderate            |
|                             |                                      | Leukemia Mononuclear  |                     |
|                             | Centrilobular                        | Necrosis              | Minimal             |
|                             | [ Leukemia Mononuclear TGLS = 2-5 ]  |                       |                     |
| * Lung                      |                                      | Infiltration Cellular | Histiocyte, Minimal |
|                             |                                      | Leukemia Mononuclear  |                     |
|                             | Lymph Node                           | Leukemia Mononuclear  |                     |
| * Lymph Node, Mesenteric    | Mediastinal                          | Leukemia Mononuclear  |                     |
|                             | [ Leukemia Mononuclear TGLS = 5-13 ] |                       |                     |
| * Nose                      |                                      | Thrombosis            | Mild                |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 252

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 435

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901112

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Ovary	Leukemia Mononuclear	
* Pancreas	Leukemia Mononuclear	
* Pituitary Gland	Leukemia Mononuclear	
* Spleen	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-12 ]		
* Stomach, Forestomach	Ulcer	Marked
[ Ulcer TGLS = 6-14 ]		
* Thymus	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-2 ]		
* Uterus	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-9 ]		

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 253

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901113

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-12+13+14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Atrophy	Minimal
		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 254

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901114

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Islets, Pancreatic	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Heart		Cardiomyopathy	Mild
* Intestine Small, Jejunum		Leiomyoma	
[ Leiomyoma TGLS = 5-14 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 4-5 ]			
* Lung	Bronchiole	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
		Leukemia Mononuclear	
		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Basophilic Focus	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 254	<b>TRT#:</b> 4 <b>DOSE:</b> 0.25%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 731 <b>HISTO:</b> 9901114
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 255

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 585

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901115

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Thrombosis	Moderate
* Ovary		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Thymus		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 255

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 585

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901115

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Polyp Stromal

[ Polyp Stromal TGLS = 4-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 256

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901116

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia Hypertrophy Leukemia Mononuclear	Mild Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Clitoral Gland [ Carcinoma TGLS = 2,3-16 ]		Carcinoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear Nephropathy	Mild
* Liver [ Leukemia Mononuclear TGLS = 6-5 ]		Basophilic Focus Inflammation Leukemia Mononuclear	Granulomatous, Focal, Moderate
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 1-14+15 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 5-13 ]	Fat	Necrosis	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 256

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901116

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Inflammation Leukemia Mononuclear	Granulomatous, Moderate
[ Inflammation TGLS = 4-12 ]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 257

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 717

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901117

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Adrenal Cortex		Degeneration	Cystic, Mild
		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
Eye		Inflammation	Chronic Active, Marked
[ Inflammation TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Necrosis	Moderate
[ Hepatodiaphragmatic Nodule TGLS = 5-15 ]			
[ Necrosis TGLS = 4-5+15 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
[ Cyst TGLS = 6-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 257	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 717
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9901117

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 7-9 ]	Pars Distalis	Adenoma	
* Skin [ Schwannoma Malignant TGLS = 2-13 ]	Subcut Tiss	Schwannoma Malignant	
* Spleen		Hematopoietic Cell Proliferation	Marked
* Thyroid Gland	C Cell	Hyperplasia	Marked

---

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Schwannoma Malignant

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 258      **TRT#:** 4      **SEX:** Female      **DAY ON TEST:** 730  
**DOSE:** 0.25%      **DISP:** Terminal Sacrifice      **HISTO:** 9901118

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Ovary		Cyst	Mild
[ Cyst TGLS = 2-8 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Salivary Glands		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:56

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 258

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901118

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 259

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 668

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901119

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 260

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 585

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901120

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Gliosis	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Ovary		Leukemia Mononuclear	
* Pancreas		Atrophy	Minimal
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 260	<b>TRT#:</b> 4 <b>DOSE:</b> 0.25%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 585 <b>HISTO:</b> 9901120
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 1-12 ]			
* Stomach, Forestomach [ Hyperplasia TGLS = 3-13 ]		Hyperplasia	Squamous, Mild
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 261

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901121

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 262

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 0.25%

DISP: Terminal Sacrifice

HISTO: 9901122

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
[ Alveolar/Bronchiolar Adenoma TGLS = 2-13 ]		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 263

TRT#: 4

SEX: Female

DAY ON TEST: 680

DOSE: 0.25%

DISP: Natural Death

HISTO: 9901123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                      |                          |                           |
|-----------------------------|----------------------|--------------------------|---------------------------|
| * Adrenal Medulla           | * Bone               | * Bone Marrow            | * Brain                   |
| * Clitoral Gland            | * Esophagus          | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Ovary                   |
| * Pancreas                  | * Parathyroid Gland  | * Salivary Glands        | * Skin                    |
| * Stomach, Forestomach      | * Thymus             | * Trachea                | * Urinary Bladder         |
| * Uterus                    |                      |                          |                           |

MISSING

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- |                          |                          |                            |                   |
|--------------------------|--------------------------|----------------------------|-------------------|
| * Intestine Large, Cecum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Pituitary Gland |
| * Thyroid Gland          |                          |                            |                   |

OBSERVATIONS

- |                                                                                       |                |                                  |                               |
|---------------------------------------------------------------------------------------|----------------|----------------------------------|-------------------------------|
| * Adrenal Cortex                                                                      |                | Necrosis                         | Moderate                      |
| * Heart                                                                               |                | Cardiomyopathy                   | Mild                          |
|                                                                                       | Atrium         | Thrombosis                       | Minimal                       |
| * Kidney                                                                              |                | Nephropathy                      | Minimal                       |
| * Liver                                                                               |                | Fatty Change                     | Marked                        |
|                                                                                       | Centrilobular  | Inflammation                     | Granulomatous, Focal, Minimal |
|                                                                                       |                | Necrosis                         | Mild                          |
| [ Fatty Change TGLS = 2-5 ]                                                           |                |                                  |                               |
| * Lung                                                                                |                | Infiltration Cellular            | Histiocyte, Minimal           |
| Note: TGL 4, "focus, 2 mm dia, dark" noted at trim, was not apparent microscopically. |                |                                  |                               |
| * Mammary Gland                                                                       |                | Fibroadenoma                     |                               |
| [ Fibroadenoma TGLS = 1-12+13 ]                                                       |                |                                  |                               |
| * Nose                                                                                | Respirat Epith | Accumulation, Hyaline Droplet    | Minimal                       |
|                                                                                       |                | Thrombosis                       | Mild                          |
| * Spleen                                                                              |                | Hematopoietic Cell Proliferation | Marked                        |
| [ Hematopoietic Cell Proliferation TGLS = 3-15 ]                                      |                |                                  |                               |
| * Stomach, Glandular                                                                  |                | Necrosis                         | Minimal                       |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 263

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 680

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901123

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Liver Fatty Change

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 264

TRT#: 4

SEX: Female

DAY ON TEST: 729

DOSE: 0.25%

DISP: Terminal Sacrifice

HISTO: 9901124

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                             |                          |                            |
|--------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla        | * Bone                      | * Brain                  | * Esophagus                |
| * Intestine Large, Cecum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic     | * Ovary                     | * Pancreas               | * Parathyroid Gland        |
| * Skin                   | * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   |
| * Trachea                | * Urinary Bladder           |                          |                            |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                                            |             |                            |                             |
|--------------------------------------------|-------------|----------------------------|-----------------------------|
| * Adrenal Cortex                           |             | Atrophy                    | Marked                      |
|                                            |             | Hypertrophy                | Mild                        |
| [ Atrophy TGLS = 8-6 ]                     |             |                            |                             |
| [ Hypertrophy TGLS = 6-6 ]                 |             |                            |                             |
| * Bone Marrow                              |             | Leukemia Mononuclear       |                             |
| * Clitoral Gland                           |             | Carcinoma                  |                             |
| [ Carcinoma TGLS = 1-13+14 ]               |             |                            |                             |
| * Heart                                    |             | Cardiomyopathy             | Minimal                     |
|                                            | Atrium      | Thrombosis                 | Minimal                     |
| * Intestine Large, Colon                   |             | Parasite Metazoan          |                             |
| * Intestine Large, Rectum                  |             | Parasite Metazoan          |                             |
| * Kidney                                   |             | Nephropathy                | Minimal                     |
| * Liver                                    |             | Basophilic Focus           |                             |
|                                            |             | Clear Cell Focus           |                             |
|                                            |             | Hepatodiaphragmatic Nodule |                             |
|                                            |             | Inflammation               | Histiocytic, Focal, Minimal |
|                                            |             | Leukemia Mononuclear       |                             |
| [ Hepatodiaphragmatic Nodule TGLS = 4-15 ] |             |                            |                             |
| * Lung                                     |             | Infiltration Cellular      | Histiocyte, Minimal         |
|                                            |             | Leukemia Mononuclear       |                             |
| Lymph Node                                 | Mediastinal | Infiltration Cellular      | Plasma Cell, Moderate       |
| [ Infiltration Cellular TGLS = 7-2 ]       |             |                            |                             |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 264	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9901124

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 9-16 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Salivary Glands		Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 265

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 634

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901125

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Colon
* Islets, Pancreatic	* Mammary Gland	* Salivary Glands	* Skin
* Stomach, Glandular	* Trachea		

**MISSING**

\* Parathyroid Gland

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Thyroid Gland		

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Mild
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear Schwannoma Benign	
* Kidney		Leukemia Mononuclear Nephropathy	Minimal
* Liver		Fatty Change Leukemia Mononuclear Necrosis	Moderate Mild
	Centrilobular		
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
[ Leukemia Mononuclear TGLS = 5-3+4+12 ]			
Lymph Node	Bronchial Mediastinal	Leukemia Mononuclear Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-2 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-8 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 265

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 634

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901125

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Lymph Node, Mesenteric [ Leukemia Mononuclear TGLS = 9-7 ]		Leukemia Mononuclear	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
		Necrosis	Mild
[ Leukemia Mononuclear TGLS = 2-13 ]			
[ Necrosis TGLS = 3-13 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
		Ulcer	Moderate
[ Ulcer TGLS = 8-15 ]			
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	
		Polyp Stromal	
[ Polyp Stromal TGLS = 1-14 ]			

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 266

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 725

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901126

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Moderate
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-8 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
Note: TGL 5, "deformity, 5 x 3 x 3 mm" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-12+13+14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 6-15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 7-9 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:56

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 266

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 725

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901126

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 267

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901127

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

* Clitoral Gland	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 2-5+14 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 268

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 717  
**HISTO:** 9901128

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Colon
* Intestine Large, Rectum	* Kidney	* Lung	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Thymus	* Urinary Bladder
* Uterus			

**MISSING**

* Clitoral Gland	* Lymph Node, Mandibular
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Pituitary Gland	* Spleen	* Stomach, Glandular	* Thyroid Gland
* Trachea			

**OBSERVATIONS**

* Islets, Pancreatic		Adenoma	
* Liver	Centrilobular	Basophilic Focus	
	[ Necrosis TGLS = 2-5 ]	Necrosis	Mild
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-12+13 ]		
* Nose		Inflammation	Suppurative, Mild

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 269

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901129

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 6-5+16 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
		Infiltration Cellular	Histiocyte, Minimal
[ Alveolar/Bronchiolar Adenoma TGLS = 5-3+15 ]			
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Moderate

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 269

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901129

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 270

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901130

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 4-5+16 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Carcinoma TGLS = 2-12+13 ]			
[ Fibroadenoma TGLS = 3-14+15 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 271

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901131

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 1-5+12 ]			
[ Clear Cell Focus TGLS = 2-13 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 3-15+16 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Salivary Glands		Basophilic Focus	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 271

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901131

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 272

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901132

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 273

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 622

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901133

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Moderate
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Metaplasia	Osseous, Minimal
	[ Metaplasia TGLS = 2-12 ]		
* Mammary Gland		Galactocele	Moderate
	[ Galactocele TGLS = 4-14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-9 ]		
* Stomach, Forestomach		Ulcer	Moderate
	[ Ulcer TGLS = 3-13 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 274

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901134

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	Lymph Node
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Bone		Osteopetrosis	Mild
* Clitoral Gland	Bilateral	Adenoma	
[ Adenoma TGLS = 2-14 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Mild
Note: TGL 6, "nodule, 2 mm3" noted at necropsy, was not apparent microscopically.			
[ Basophilic Focus TGLS = 5-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
Lymph Node			
Note: TGL 4, "deep cervical, enlarged, 4x" noted at necropsy, was within normal limits microscopically.			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,7-15+17 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 274

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 9901134

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**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Cyst TGLS = 3-16 ]

\* Thyroid Gland  
Tooth

C Cell

Hyperplasia  
Inflammation

Mild  
Chronic Active, Mild

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 275

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901135

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
	[ Basophilic Focus TGLS = 4-5 ]		
	[ Mixed Cell Focus TGLS = 5-5 ]		
* Lung		Alveolar/Bronchiolar Carcinoma	
		Infiltration Cellular	Histiocyte, Minimal
	[ Alveolar/Bronchiolar Carcinoma TGLS = 7-4 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 2-13 ]		
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 3-14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 275	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 731
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9901135

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hyperplasia TGLS = 6-9 ]			
* Salivary Glands		Sarcoma	
[ Sarcoma TGLS = 1-12 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 276

TRT#: 4

SEX: Female

DAY ON TEST: 683

DOSE: 0.25%

DISP: Moribund Sacrifice

HISTO: 9901136

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Thymus
* Trachea	* Uterus		

MISSING

* Clitoral Gland	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
Note: TGL 2, "enlarged, 3x" noted at necropsy, was not apparent microscopically.			
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Sarcoma	Metastatic (Skin)
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Sarcoma	Metastatic (Skin)
	[ Hepatodiaphragmatic Nodule TGLS = 4-17 ]		
	[ Sarcoma TGLS = 3-16 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Sarcoma	Metastatic (Skin)
	[ Sarcoma TGLS = 6,7-14+15 ]		
* Mammary Gland		Fibroadenoma	Multiple
* Nose		Inflammation	Suppurative, Marked
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 5-9 ]		
* Skin	Subcut Tiss	Sarcoma	
	[ Sarcoma TGLS = 1-12+13 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 276

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 683

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901136

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Spleen		Sarcoma	Metastatic (Skin)
* Stomach, Forestomach		Ulcer	Mild
* Stomach, Glandular		Necrosis	Minimal
[ Necrosis TGLS = 8-18 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tooth		Inflammation	Chronic Active, Marked
* Urinary Bladder		Sarcoma	Metastatic (Skin)

**PRIMARY CAUSE OF DEATH** - Skin Subcut Tiss Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 277

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 721

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901137

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Thymus	* Trachea		

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Pituitary Gland	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
	Centrilobular	Necrosis	Mild
	[ Hepatodiaphragmatic Nodule TGLS = 4-12 ]		
	[ Necrosis TGLS = 5-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,2,3-13+15+14 ]		
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 278

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901138

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-8 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
		Inflammation	Suppurative, Mild
* Pancreas		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 278

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901138

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 279

TRT#: 4

SEX: Female

DAY ON TEST: 417

DOSE: 0.25%

DISP: Natural Death

HISTO: 9901139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                           |                             |                            |
|--------------------------|---------------------------|-----------------------------|----------------------------|
| * Bone                   | * Brain                   | * Clitoral Gland            | * Esophagus                |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Jejunum |
| * Islets, Pancreatic     | * Mammary Gland           | * Ovary                     | * Pancreas                 |
| * Parathyroid Gland      | * Salivary Glands         | * Skin                      | * Stomach, Forestomach     |
| * Stomach, Glandular     | * Trachea                 | * Urinary Bladder           | * Uterus                   |

MISSING

- |                          |          |
|--------------------------|----------|
| * Lymph Node, Mandibular | * Thymus |
|--------------------------|----------|

AUTO PRECLUDES DIAG.

- |                          |                          |                   |                          |
|--------------------------|--------------------------|-------------------|--------------------------|
| * Adrenal Cortex         | * Adrenal Medulla        | * Bone Marrow     | * Intestine Large, Cecum |
| * Intestine Small, Ileum | * Lymph Node, Mesenteric | * Pituitary Gland | * Thyroid Gland          |

OBSERVATIONS

- |                                       |                |                               |                   |
|---------------------------------------|----------------|-------------------------------|-------------------|
| * Heart                               |                | Cardiomyopathy                | Moderate          |
| * Kidney                              |                | Inflammation                  | Suppurative, Mild |
| * Liver                               |                | Fatty Change                  | Moderate          |
|                                       |                | Leukemia Mononuclear          |                   |
|                                       | Centrilobular  | Necrosis                      | Mild              |
| [ Leukemia Mononuclear TGLS = 3-5 ]   |                |                               |                   |
| * Lung                                |                | Leukemia Mononuclear          |                   |
| [ Leukemia Mononuclear TGLS = 4-3+4 ] |                |                               |                   |
| Mesentery                             | Fat            | Necrosis                      | Mild              |
| [ Necrosis TGLS = 5-12 ]              |                |                               |                   |
| * Nose                                | Respirat Epith | Accumulation, Hyaline Droplet | Minimal           |
|                                       |                | Thrombosis                    | Mild              |
| * Spleen                              |                | Leukemia Mononuclear          |                   |
| [ Leukemia Mononuclear TGLS = 2-5 ]   |                |                               |                   |

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 280

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901140

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	Lymph Node	* Lymph Node, Mesenteric	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Bronchiole	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
Note: TGL 4, "mediastinal, enlarged, 4x, tan" noted at necropsy, was within normal limits microscopically.			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Mild
* Pancreas		Atrophy	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3+5-9 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 280

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901140

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 281

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901141

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Fibroadenoma	Multiple
		Sarcoma	
[ Fibroadenoma TGLS = 1,2-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 282

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901142

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Carcinoma TGLS = 1-12+13 ]			
[ Fibroadenoma TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 283

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 542

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901143

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**AUTO PRECLUDES DIAG.**

\* Intestine Small, Ileum

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Kidney		Hydronephrosis	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
	[ Hydronephrosis TGLS = 4-6 ]		
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Hemorrhage	Moderate
	Fat	Necrosis	Mild
	[ Hemorrhage TGLS = 5-15 ]		
	[ Necrosis TGLS = 7-14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 283

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 542

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901143

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 6-9 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 1-12 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

\* Urin Bladder

Note: Bladder was within normal limits microscopically.

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**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 284

TRT#: 4

SEX: Female

DAY ON TEST: 425

DOSE: 0.25%

DISP: Natural Death

HISTO: 9901144

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Brain
- \* Intestine Large, Rectum
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Spleen
- \* Thyroid Gland

- \* Adrenal Medulla
- \* Clitoral Gland
- \* Intestine Small, Duodenum
- \* Mammary Gland
- \* Pituitary Gland
- \* Stomach, Forestomach
- \* Trachea

- \* Bone
- \* Esophagus
- \* Islets, Pancreatic
- \* Ovary
- \* Salivary Glands
- \* Stomach, Glandular
- \* Urinary Bladder

- \* Bone Marrow
- \* Intestine Large, Colon
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Skin
- \* Thymus
- \* Uterus

AUTO PRECLUDES DIAG.

- \* Intestine Large, Cecum

- \* Intestine Small, Ileum

- \* Intestine Small, Jejunum

OBSERVATIONS

- \* Heart
- \* Kidney
- \* Liver

- Cardiomyopathy
- Nephropathy
- Basophilic Focus
- Inflammation
- Inflammation
- Infiltration Cellular

- Minimal
- Minimal
- Histiocytic, Focal, Minimal
- Granulomatous, Focal, Minimal
- Histiocyte, Minimal

- \* Lung

Note: TGL 1, "discoloration, dark red" noted at necropsy, was due to post mortem pooling of blood.

- \* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Mild

PRIMARY CAUSE OF DEATH

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 285

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901145

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 286

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 0.25%

DISP: Terminal Sacrifice

HISTO: 9901146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Ectasia	Mild
[ Ectasia TGLS = 4-2 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,5-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Atrophy	Minimal
* Skin		Trichoepithelioma	
[ Trichoepithelioma TGLS = 1-12 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 287

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 585

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901147

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Fatty Change	Mild
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Salivary Glands		Inflammation	Suppurative, Minimal
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 288

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 641

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901148

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**INSUFFICIENT TISSUE**

\* Pituitary Gland

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Schwannoma Malignant	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Schwannoma Malignant	Metastatic (Heart)
	[ Schwannoma Malignant TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
	Mediastinum	Schwannoma Malignant	Metastatic (Heart)
	[ Schwannoma Malignant TGLS = 3-2 ]		
* Lymph Node, Mesenteric		Ectasia	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach, Glandular		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 5-13 ]		
* Uterus		Polyp Stromal	Multiple
	[ Polyp Stromal TGLS = 4-12 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 288

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 641

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901148

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Heart Schwannoma Malignant

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 289

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901149

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Tension Lipidosis	
<p>Note: TGL 5, "deformity, 9 x 6 x 3 mm" noted at necropsy, was variation in normal lobar morphology.</p> <p>[ Basophilic Focus TGLS = 4-5 ]</p> <p>[ Tension Lipidosis TGLS = 6-12 ]</p>			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
<p>[ Fibroadenoma TGLS = 2,3-14+15+16 ]</p>			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
<p>[ Adenoma TGLS = 1-9 ]</p>			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 289

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901149

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 290

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901150

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Clitoral Gland		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	Multiple
[ Polyp Stromal TGLS = 4,5-12+9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 291

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901151

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Intestine Large, Colon	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 4-12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14+15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Basophilic Focus	
* Pituitary Gland		Cyst	Minimal
[ Cyst TGLS = 3-9 ]			
* Stomach, Glandular		Hypertrophy	Focal, Mild
		Mineralization	Minimal
[ Hypertrophy TGLS = 5-16 ]			
* Thyroid Gland	C Cell	Carcinoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 291

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901151

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 292	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 624
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9901152

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone	* Brain	* Heart	* Salivary Glands
* Skin	* Thymus		

---

**MISSING**

\* Lymph Node, Mandibular

---

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

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**OBSERVATIONS**

* Kidney [ Sarcoma TGLS = 6,14-6+21 ]		Sarcoma	Metastatic (Skeletal Muscle)
* Liver [ Sarcoma TGLS = 5-13 ]		Sarcoma	Metastatic (Skeletal Muscle)
* Lung [ Sarcoma TGLS = 8-3 ]	Mediastinum	Sarcoma Sarcoma	Metastatic (Skeletal Muscle) Metastatic (Skeletal Muscle)
Mesentery [ Necrosis TGLS = 9-20 ] [ Sarcoma TGLS = 9,10-20+14 ]	Fat	Necrosis Sarcoma	Mild Metastatic (Skeletal Muscle)
* Ovary [ Cyst TGLS = 13-16 ]		Cyst Sarcoma	Moderate Metastatic (Skeletal Muscle)
* Pituitary Gland [ Adenoma TGLS = 7-9 ]	Pars Distalis	Adenoma	
Skeletal Muscle [ Sarcoma TGLS = 1-17 ]		Sarcoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 292

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 624

**DOSE:** 0.25%

**DISP:** Natural Death

**HISTO:** 9901152

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Spleen [ Sarcoma TGLS = 4-12 ]	Sarcoma	Metastatic (Skeletal Muscle)
* Stom Gland Note: TGL 11, "lesions, 1 x 1 mm, dark" noted at trim, were not apparent microscopically and may have been obscured by post mortem autolysis.		
* Stomach, Forestomach [ Ulcer TGLS = 12-15 ]	Ulcer	Moderate
* Urin Bladder Note: TGL 14, "enlarged, 1.5 cm dia, dark" noted at trim, was actually kidney.		
* Uterus Note: TGL 2, "mass, 6 x 5 x 4 mm, mottled" noted at necropsy was not apparent microscopically and may have been obscured by post mortem autolysis.		
Vagina [ Sarcoma TGLS = 3-18 ]	Sarcoma	Metastatic (Skeletal Muscle)

PRIMARY CAUSE OF DEATH - Skeletal Muscle Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 293

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901153

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Clitoral Gland		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Infarct	Mild
	Pelvis	Inflammation	Acute, Mild
		Nephropathy	Mild
[ Infarct TGLS = 3-6 ]			
* Liver		Angiectasis	Minimal
		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Note: TGL 4, "focus, 4 x 1 mm, pale" noted at trim, was not apparent microscopically.			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 5-12 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 293	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9901153

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Atrophy	Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 294

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901154

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone		Osteopetrosis	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
Lymph Node	Bronchial	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-12 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 294	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 731
	<b>DOSE:</b> 0.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9901154

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-13 ]			

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 295

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901155

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Bone		Osteopetrosis	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,4-12+13+14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Moderate

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 296

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901156

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Angiectasis	Moderate
		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Angiectasis	Minimal
		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
	Centrilobular	Necrosis	Mild
	[ Basophilic Focus TGLS = 2-5 ]		
	[ Hepatodiaphragmatic Nodule TGLS = 3-14 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-12+13 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin	Subcut Tiss	Sarcoma	
	[ Sarcoma TGLS = 1-13 ]		
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach, Forestomach		Squamous Cell Papilloma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 296

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901156

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 297

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901157

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	Lymph Node
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 1-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
	Note: TGL 3, "cervical, enlarged, 6 x 3 mm, dark" noted at trim, was within normal limits microscopically.		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-13 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 297

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901157

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 298

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901158

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Degeneration	Cystic, Mild
		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
		Galactocele	Mild
[ Fibroadenoma TGLS = 4,5-13+14 ]			
[ Galactocele TGLS = 1-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Stomach, Glandular	Neurondo Cell	Hyperplasia	Marked
[ Hyperplasia TGLS = 6-15 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 298

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901158

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Note: TGL 3, "dilation, 5 x 6 mm, clear" noted at trim, was within normal limits microscopically.

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 299

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 0.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9901159

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 3-8 ]			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
		Inflammation	Chronic, Marked
[ Fibroadenoma TGLS = 2-14 ]			
[ Inflammation TGLS = 1-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 5-12 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 299

**TRT#:** 4  
**DOSE:** 0.25%

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 9901159

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell  
Follicular Cel

Hyperplasia  
Hyperplasia

Moderate  
Mild

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 300

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 626

**DOSE:** 0.25%

**DISP:** Moribund Sacrifice

**HISTO:** 9901160

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Clear Cell Focus TGLS = 2-12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,3-13+14 ]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 301

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901161

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Clitoral G1			
Note: NO CORRELATING LESIONS FOR TGLS 3-8.			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
Note: TGL 7. "nodule, 7 x 5 mm" noted at trim, was variation in normal lobar morphology. [ Basophilic Focus TGLS = 6-13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2,5-14+15+16+17+18+19+20 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:56

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 302

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 1.0%

DISP: Terminal Sacrifice

HISTO: 9901162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Clitoral Gland		Sarcoma	
[ Sarcoma TGLS = 4-8 ]			
* Heart		Cardiomyopathy	Minimal
		Schwannoma Benign	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
Lymph Node	Deep Cervical	Ectasia	Mild
[ Ectasia TGLS = 3-12 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:56

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 302

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901162

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Pituitary Gland

Pars Distalis

Hyperplasia

Marked

\* Salivary Glands

Basophilic Focus

\* Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 303

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901163

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe Pelvis	Hyperplasia Inflammation Nephropathy	Minimal Acute, Moderate Mild
* Liver		Basophilic Focus Clear Cell Focus Inflammation Inflammation	  Histiocytic, Focal, Minimal Granulomatous, Focal, Minimal
	[ Basophilic Focus TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,5-13+12 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Salivary Glands		Atrophy	Minimal
* Thyroid Gland	Follicular Cel C Cell	Carcinoma Hyperplasia	Mild
* Uterus		Sarcoma Stromal	
	[ Sarcoma Stromal TGLS = 4-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 303

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901163

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 304

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901164

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Bronchiole	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 305

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901165

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Bronchiole	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,4-12+13+14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 306

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901166

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
Note: TGL 4, "deformity" noted at necropsy, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2,3-13+14+15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 307

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901167

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary	Interstit Cell	Hyperplasia	Moderate
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Tooth		Inflammation	Chronic Active, Mild

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 308

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901168

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 309

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901169

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 1-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
	[ Cyst TGLS = 2-8 ]		
* Pituitary Gl			
	Note: TGL 3, "focus, 2 x 1 mm, dark" noted at necropsy, was not apparent microscopically.		
* Salivary Glands		Atrophy	Minimal
* Thyroid Gland	C Cell	Carcinoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 310

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901170

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
* Lung		Carcinoma	Metastatic (Mammary Gland)
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	Multiple
		[ Carcinoma TGLS = 1-12+13 ]	
		[ Fibroadenoma TGLS = 1,3-12+13+14 ]	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spleen		Hematopoietic Cell Proliferation	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 310

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901170

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Minimal

\* Uterus

Carcinoma

[ Carcinoma TGLS = 2-9 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 311

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901171

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith Bronchiole	Hyperplasia	Marked
		Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 311

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901171

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 312

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901172

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 3-5 ]			
[ Mixed Cell Focus TGLS = 4-13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-12+14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland		Angiectasis	Moderate
	Pars Distalis	Hyperplasia	Mild
[ Angiectasis TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 313

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 598

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901173

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

Eye [ Cataract TGLS = 1-12 ]		Cataract	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus Inflammation	Granulomatous, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 314

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901174

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
[ Hepatodiaphragmatic Nodule TGLS = 3-12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 4-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Cyst	Moderate
[ Cyst TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 315

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901175

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
Eye	Retina	Atrophy	Marked
		Cataract	Marked
	[ Cataract TGLS = 1-12 ]		
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Mild
		Inflammation	Granulomatous, Focal, Minimal
	[ Basophilic Focus TGLS = 3-5+14 ]		
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 2-13 ]		
* Nose		Inflammation	Suppurative, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 316

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901176

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 317

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901177

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-13+14 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
Lymph Node	Deep Cervical	Ectasia	Minimal
[ Ectasia TGLS = 6-12 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15+16 ]			
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 317

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901177

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Polyp Stromal

[ Polyp Stromal TGLS = 4-17 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 318

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901178

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
Note: TGL 3, "deformity, diffuse" noted at necropsy, was not apparent microscopically.			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Metaplasia	Squamous, Marked
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:56  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 319

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901179

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Basophilic Focus TGLS = 3-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,5-12+13+15 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Spleen		Inflammation	Granulomatous, Marked
[ Inflammation TGLS = 4-14 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 320	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 1.0%	<b>DISP:</b> Natural Death	<b>HISTO:</b> 9901180

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Parathyroid Gland	* Salivary Glands	* Thymus
* Urinary Bladder			

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**MISSING**

\* Lymph Node, Mandibular

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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Nose	* Stomach, Glandular
* Thyroid Gland	* Trachea		

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 4-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 3-5 ]			
* Lung		Histiocytic Sarcoma	
Lymph Node	Mediastinal	Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 2-2 ]			
* Lymph Node, Mesenteric		Histiocytic Sarcoma	
Mesentery		Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 5,6-12+13 ]			
* Ovary		Histiocytic Sarcoma	
* Pancreas		Histiocytic Sarcoma	
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin	Subcut Tiss	Histiocytic Sarcoma	
* Spleen		Histiocytic Sarcoma	
* Stomach, Forestomach		Histiocytic Sarcoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 320

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 600

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901180

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Polyp Stromal

---

PRIMARY CAUSE OF DEATH

- Lung Histiocytic Sarcoma

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 321

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901181

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Alveolar/Bronchiolar Carcinoma	
		Infiltration Cellular	Histiocyte, Minimal
[ Alveolar/Bronchiolar Carcinoma TGLS = 2-4 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 322

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901182

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,4-12+13+14 ]		
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 323

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901183

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Histiocytic Sarcoma	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1-13+14 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 5-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
[ Cyst TGLS = 2-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 323

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901183

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Note: TGL 3, "dilatation, 4 x 3 x 3 mm, dark" noted at necropsy, was not apparent microscopically.

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 324

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901184

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
[ Hepatodiaphragmatic Nodule TGLS = 2-13 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Metaplasia	Squamous, Mild
[ Metaplasia TGLS = 4-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Minimal
		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 324

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901184

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 325

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901185

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
	[ Basophilic Focus TGLS = 9-5 ]		
	[ Leukemia Mononuclear TGLS = 8-5 ]		
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
	[ Inflammation TGLS = 12-18 ]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 10-2 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 325	<b>TRT#:</b> 6 <b>DOSE:</b> 1.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9901185
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Lymph Node, Mesenteric [ Leukemia Mononuclear TGLS = 11-7 ]		Leukemia Mononuclear	
* Mammary Gland [ Carcinoma TGLS = 3-15+16 ] [ Fibroadenoma TGLS = 1,2,3,4-12+13+14+15+16+17 ]		Carcinoma Fibroadenoma	Multiple
* Nose Olfactory Epi		Atrophy Inflammation Cyst	Minimal Suppurative, Minimal Marked
* Ovary [ Cyst TGLS = 7-20 ]			
* Pituitary Gland [ Adenoma TGLS = 6-9 ]	Pars Distalis	Adenoma Leukemia Mononuclear	
* Spleen [ Leukemia Mononuclear TGLS = 5-19 ]		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 326

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 667

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901186

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Bone		Osteosarcoma	
* Brain		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 1-1 ]			
* Clitoral Gland		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
[ Fatty Change TGLS = 4-14 ]			
[ Mixed Cell Focus TGLS = 2-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Inflammation	Suppurative, Minimal
* Stom Forestom			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 326

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 667

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901186

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 5, "lesion, 2 mm dia, pale" noted at trim, was not apparent microscopically.

\* Stom Gland

Note: TGL 6, "nodule, 1 mm dia, pale" noted at trim, was normal fold in glandular mucosa.

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

- Bone Osteosarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 327

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901187

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
	[ Basophilic Focus TGLS = 1-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 3,4,5-12+13+14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Hyperplasia	Marked
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
	[ Hyperplasia TGLS = 2-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 328

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 597

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901188

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Brain	Meninges	Fibrosis	Moderate
[ Fibrosis TGLS = 1-14 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-12+13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 6-15 ]			
* Ovary		Cyst	Moderate
[ Cyst TGLS = 4-8 ]			
* Pituitary Gland	Pars Distalis	Carcinoma	
* Spleen			
Note: TGL 5, "small, 0.3x" noted at necropsy was within normal limits microscopically.			
* Stomach, Forestomach		Ulcer	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 329

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 295

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901189

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Mammary Gland	* Ovary
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Pancreas	* Parathyroid Gland	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-1 ]			
* Kidney		Leukemia Mononuclear	
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 3-5 ]			
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 2-12 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Thymus		Leukemia Mononuclear	

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 330

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901190

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 331

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 604

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901191

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Kidney		Infarct	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Minimal
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 4-5 ]			
[ Hepatodiaphragmatic Nodule TGLS = 3-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Uterus		Sarcoma Stromal	
[ Sarcoma Stromal TGLS = 1,2-13+14 ]			

**PRIMARY CAUSE OF DEATH**

- Uterus Sarcoma Stromal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 332

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901192

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Cyst	Mild
		Nephropathy	Mild
[ Cyst TGLS = 3-12 ]			
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 333

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901193

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 334

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901194

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 335

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901195

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

**INSUFFICIENT TISSUE**

\* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal

Note: TGL 4, "deformity, 8 x 3 x 5 mm" noted at necropsy, was variation in normal lobar morphology.

[ Basophilic Focus TGLS = 3-5 ]

* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Marked
			[ Cyst TGLS = 1-13 ]
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Hyperplasia	Cystic, Mild

[ Hyperplasia TGLS = 2-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 335

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901195

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 336

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901196

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Bone		Osteopetrosis	Moderate
* Heart		Cardiomyopathy	Mild
		Schwannoma Benign	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
		Galactocele	Moderate
[ Fibroadenoma TGLS = 2-12+13 ]			
[ Galactocele TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 337

TRT#: 6

SEX: Female

DAY ON TEST: 730

DOSE: 1.0%

DISP: Terminal Sacrifice

HISTO: 9901197

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                            |                          |                           |
|-----------------------------|----------------------------|--------------------------|---------------------------|
| * Bone                      | * Bone Marrow              | * Brain                  | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum   | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic     | * Ovary                   |
| * Pancreas                  | * Parathyroid Gland        | * Salivary Glands        | * Skin                    |
| * Stomach, Forestomach      | * Stomach, Glandular       | * Thymus                 | * Trachea                 |
| * Urinary Bladder           | * Uterus                   |                          |                           |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                                      |                |                               |                               |
|--------------------------------------|----------------|-------------------------------|-------------------------------|
| * Adrenal Cortex                     |                | Leukemia Mononuclear          |                               |
| * Adrenal Medulla                    |                | Leukemia Mononuclear          |                               |
| * Clitoral Gland                     |                | Adenoma                       |                               |
| [ Adenoma TGLS = 1,4-13 ]            |                |                               |                               |
| * Intestine Small, Ileum             |                | Leukemia Mononuclear          |                               |
| * Kidney                             |                | Leukemia Mononuclear          |                               |
|                                      |                | Nephropathy                   | Minimal                       |
| * Liver                              |                | Basophilic Focus              |                               |
|                                      |                | Inflammation                  | Granulomatous, Focal, Minimal |
|                                      |                | Leukemia Mononuclear          |                               |
| * Lung                               |                | Infiltration Cellular         | Histiocyte, Minimal           |
|                                      |                | Inflammation                  | Chronic Active, Minimal       |
|                                      |                | Leukemia Mononuclear          |                               |
| Lymph Node                           | Mediastinal    | Leukemia Mononuclear          |                               |
| * Lymph Node, Mesenteric             |                | Leukemia Mononuclear          |                               |
| * Mammary Gland                      |                | Fibroadenoma                  |                               |
| [ Fibroadenoma TGLS = 2-14 ]         |                |                               |                               |
| * Nose                               | Respirat Epith | Accumulation, Hyaline Droplet | Mild                          |
| * Pituitary Gland                    | Pars Distalis  | Hyperplasia                   | Mild                          |
| * Spleen                             |                | Leukemia Mononuclear          |                               |
| [ Leukemia Mononuclear TGLS = 3-12 ] |                |                               |                               |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 337

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901197

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 338

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 638

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901198

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Islets, Pancreatic	Lymph Node
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Thymus
* Urinary Bladder	* Uterus		

**MISSING**

* Adrenal Medulla	* Lymph Node, Mandibular
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Nose	* Thyroid Gland	* Trachea

**OBSERVATIONS**

* Adrenal Cortex		Angiectasis	Moderate
		Hyperplasia	Mild
[ Angiectasis TGLS = 1-6 ]			
* Intestine Large, Rectum		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 5-13 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Mild
	Centrilobular	Necrosis	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node			
Note: TGL 2, "mediastinal, enlarged, 3x, dark red" noted at necropsy, was not apparent microscopically.			
Mesentery		Sarcoma	
[ Sarcoma TGLS = 4-12 ]			
* Pancreas		Atrophy	Marked
* Pituitary Gland		Angiectasis	Mild
[ Angiectasis TGLS = 3-9 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach, Glandular		Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 338

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 638

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901198

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 6-9+14 ]

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**PRIMARY CAUSE OF DEATH**

- Mesentery Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 339

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901199

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Minimal
Note: TGL 5, "nodule, 5 x 3 x 2 mm" noted at necropsy, was not apparent microscopically.			
[ Basophilic Focus TGLS = 3-5 ]			
[ Hepatodiaphragmatic Nodule TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 6-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-13 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 339

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901199

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 340

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 717

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901200

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 341

TRT#: 6

SEX: Female

DAY ON TEST: 665

DOSE: 1.0%

DISP: Natural Death

HISTO: 9901201

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Bone
- \* Salivary Glands
- \* Brain
- \* Stomach, Forestomach
- \* Esophagus
- \* Uterus
- \* Parathyroid Gland

MISSING

- \* Clitoral Gland
- \* Lymph Node, Mandibular
- \* Thymus

AUTO PRECLUDES DIAG.

- \* Adrenal Cortex
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Nose
- \* Thyroid Gland
- \* Adrenal Medulla
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Ovary
- \* Trachea
- \* Bone Marrow
- \* Intestine Small, Duodenum
- \* Kidney
- \* Pancreas
- \* Urinary Bladder
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lymph Node, Mesenteric
- \* Spleen

OBSERVATIONS

- \* Heart
  - \* Liver
  - \* Lung
    - [ Sarcoma TGLS = 3,4,5,6,8-12+13+14+3+4+16+15 ]
  - \* Mammary Gland
    - [ Fibroadenoma TGLS = 7-19 ]
  - \* Pituitary Gland
    - [ Angiectasis TGLS = 2-9 ]
  - \* Skin
    - [ Sarcoma TGLS = 1,9-17+18+20 ]
  - \* Stomach, Glandular
    - [ Necrosis TGLS = 10-21 ]
- Subcut Tiss
- Cardiomyopathy  
Basophilic Focus  
Sarcoma  
Sarcoma
- Fibroadenoma
- Angiectasis
- Sarcoma
- Necrosis
- Minimal  
Metastatic (Skin)  
Metastatic (Skin)  
Multiple  
Mild  
Minimal

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Sarcoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 342

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 681

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901202

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Clitoral Gland			
Note: TGL 1, "cyst, 2 x 1 x 1 mm, clear" noted at necropsy, was not apparent microscopically.			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
			[ Basophilic Focus TGLS = 8-14 ]
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
			[ Necrosis TGLS = 3-12 ]
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Parathyroid Gland			
Note: TGL 4, "enlarged, 2x" noted at necropsy, was not apparent microscopically.			
* Pituitary Gland	Pars Distalis	Adenoma	
			[ Adenoma TGLS = 5,6-9+1 ]
* Spleen		Accessory Spleen	
			[ Accessory Spleen TGLS = 2-5 ]
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
			[ Hyperplasia TGLS = 7-13 ]
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 342

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 681

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901202

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Uterus

Polyp Stromal

---

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 343

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901203

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
		Schwannoma Benign	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Carcinoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 344

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901204

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Mild
Note: TGL 5, "mass, 1.5 cm dia x 1 cm, mottled, pale" noted at trim, actually involved mammary gland, not clitoral.			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,5-12+13+8 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Salivary Glands		Basophilic Focus	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 345

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901205

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-12 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 346

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Natural Death

**HISTO:** 9901206

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

* Clitoral Gland	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 2,5-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,6-12+14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 347

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901207

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
[ Inflammation TGLS = 2-4 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 348

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 725

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901208

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Moderate
* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 8-6 ]		
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
	[ Basophilic Focus TGLS = 7-20 ]		
* Lung		Cyst	Squamous, Moderate
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
	[ Cyst TGLS = 2-19 ]		
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 3,4,5-13+14+15+16+17+18 ]		
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 6-12 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 348

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 725

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901208

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 349

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901209

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-12+13 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland			
Note: TGL 1, "mass, 35 x 15 x 15 mm, brown" noted at necropsy, involved clitoral gland, not mammary.			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 2-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 349

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 1.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901209

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 350

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 627

**DOSE:** 1.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901210

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Mammary Gland	* Parathyroid Gland	* Salivary Glands	* Skin
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-1 ]			
* Heart		Leukemia Mononuclear	
* Intestine Small, Ileum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 350	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 627
	<b>DOSE:</b> 1.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9901210

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-12 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
		Necrosis	Mild
[ Leukemia Mononuclear TGLS = 1,8-12+15 ]			
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 7-14 ]			
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 351

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901211

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
Eye		Degeneration	Marked
[ Degeneration TGLS = 2-14 ]			
* Intestine Large, Colon		Parasite Metazoan	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Infarct	Mild
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5+12 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
	Olfactory Epi	Degeneration	Minimal
* Uterus		Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 351

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901211

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 352

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901212

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Pituitary Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 3-5+12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
Lymph Node	Mediastinal	Infiltration Cellular	Plasma Cell, Moderate
[ Infiltration Cellular TGLS = 2-14 ]			
* Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 5-8 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
	Olfactory Epi	Degeneration	Mild
* Parathyroid Gland		Hyperplasia	Mild
* Skin		Inflammation	Chronic Active, Moderate
[ Inflammation TGLS = 1-13 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 352

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901212

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 353

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901213

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
Lymph Node	Mediastinal	Ectasia	Mild
[ Ectasia TGLS = 4-2 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland		Angiectasis	Minimal
[ Angiectasis TGLS = 5-9 ]			

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 354

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 668

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901214

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Colon
* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland	* Skin
* Trachea			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Mild
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Necrosis	Mild
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Intestine Large, Cecum		Leukemia Mononuclear	
* Intestine Large, Rectum		Leukemia Mononuclear	
* Intestine Small, Duodenum		Leukemia Mononuclear	
* Intestine Small, Ileum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney		Infarct	Moderate
		Leukemia Mononuclear	
		Nephropathy	Minimal
[ Infarct TGLS = 2,9-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-3+4 ]			
Lymph Node	Bronchial	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 354	<b>TRT#:</b> 8	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 668
	<b>DOSE:</b> 4.0%	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 9901214

**ORGAN AND ACCOUNTABLE SITE STATUS**

	Mediastinal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-2 ]		
	[ Leukemia Mononuclear TGLS = 6-3 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-13 ]		
Mesentery		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 10-14 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Leukemia Mononuclear	
* Ovary		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 11-15 ]		
* Pancreas		Leukemia Mononuclear	
	Note: TGL 11, "mass, 2 mm dia, brown" noted at trim, was actually ovary infiltrated by leukemia cells.		
* Pituitary Gland		Leukemia Mononuclear	
* Salivary Glands		Atrophy	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 12-16 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-12 ]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Leukemia Mononuclear	
* Uterus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: TGL 12, tissue NOS at trim, was salivary gland.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 355

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901215

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Hemangiosarcoma	
* Kidney		Mesenchymal Tumor Malignant	
		Nephropathy	Mild
	[ Mesenchymal Tumor Malignant TGLS = 2-6 ]		
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
	[ Hepatodiaphragmatic Nodule TGLS = 1-5 ]		
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
	Olfactory Epi	Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 356

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901216

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 357

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 718

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901217

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Intestine Small, Ileum		Necrosis	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-6 ]			
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 1-5+12 ]		Inflammation	Histiocytic, Focal, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands		Inflammation	Suppurative, Mild

**PRIMARY CAUSE OF DEATH**

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 358

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901218

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

Eye	Retina	Atrophy Degeneration	Marked Marked
[ Degeneration TGLS = 1-12 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus Clear Cell Focus	
	Bile Duct	Hyperplasia Inflammation Inflammation	Minimal Granulomatous, Focal, Minimal Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 4-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Deep Cervical	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Cyst	Mild
[ Cyst TGLS = 5-8 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 359

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 694

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901219

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Moderate
* Adrenal Medulla		Leukemia Mononuclear	
		Necrosis	Marked
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Infarct	Moderate
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Infarct TGLS = 7-6 ]			
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7+12 ]			
* Mammary Gland		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 359

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 694

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901219

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Fibroadenoma TGLS = 4-14 ]

* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Leukemia Mononuclear	
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
		Leukemia Mononuclear	

[ Leukemia Mononuclear TGLS = 6-9 ]

* Spleen		Leukemia Mononuclear	
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[ Leukemia Mononuclear TGLS = 2-5 ]

* Stomach, Glandular		Necrosis	Moderate
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[ Necrosis TGLS = 8-13 ]

* Thymus		Leukemia Mononuclear	
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[ Leukemia Mononuclear TGLS = 5-2 ]

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 360	<b>TRT#:</b> 8	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 731
	<b>DOSE:</b> 4.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9901220

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Parathyroid Gland	* Salivary Glands	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
	[ Basophilic Focus TGLS = 3,5-5 ]		
	[ Mixed Cell Focus TGLS = 4-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-12 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin		Inflammation	Chronic Active, Moderate
	[ Inflammation TGLS = 2-13 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 361

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901221

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Mild
Note: TGL 5, "deformity, 9 x 8 x 4 mm" noted at necropsy, was not apparent microscopically.			
[ Basophilic Focus TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-12+13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Cyst	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Inflammation	Granulomatous, Marked
[ Inflammation TGLS = 4-5 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 362

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901222

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 363

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 626

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901223

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney		Infarct	Mild
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Infarct TGLS = 4-6 ]			
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 6-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary			

Note: TGL 5, "cyst, 5 mm dia, clear" noted at trim, was not apparent microscopically.

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 363	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 626 <b>HISTO:</b> 9901223
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
* Stomach, Glandular		Necrosis	Mild
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	Multiple
[ Polyp Stromal TGLS = 7,8-9+13 ]			

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 364

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901224

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-8 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 365

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901225

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 366

TRT#: 8

SEX: Female

DAY ON TEST: 659

DOSE: 4.0%

DISP: Natural Death

HISTO: 9901226

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                      |                   |                  |                   |
|----------------------|-------------------|------------------|-------------------|
| * Bone               | * Brain           | * Clitoral Gland | * Esophagus       |
| * Islets, Pancreatic | * Mammary Gland   | * Nose           | * Pancreas        |
| * Parathyroid Gland  | * Salivary Glands | * Skin           | * Urinary Bladder |
| * Uterus             |                   |                  |                   |

MISSING

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | * Bone Marrow               | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Kidney                  | * Ovary                     | * Pituitary Gland        |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          |
| * Trachea                  |                           |                             |                          |

OBSERVATIONS

- |                                                                                        |     |                       |                     |
|----------------------------------------------------------------------------------------|-----|-----------------------|---------------------|
| * Heart                                                                                |     | Cardiomyopathy        | Minimal             |
| * Liver                                                                                |     | Basophilic Focus      |                     |
|                                                                                        |     | Leukemia Mononuclear  |                     |
| * Lung                                                                                 |     | Infiltration Cellular | Histiocyte, Minimal |
|                                                                                        |     | Leukemia Mononuclear  |                     |
| * Lymph Node, Mesenteric                                                               |     | Leukemia Mononuclear  |                     |
| Mesentery                                                                              | Fat | Necrosis              | Mild                |
| [ Necrosis TGLS = 3-13 ]                                                               |     |                       |                     |
| * Spleen                                                                               |     | Hemorrhage            | Moderate            |
|                                                                                        |     | Leukemia Mononuclear  |                     |
| [ Hemorrhage TGLS = 2,3-12+13 ]                                                        |     |                       |                     |
| [ Leukemia Mononuclear TGLS = 1-5 ]                                                    |     |                       |                     |
| * Stom Gland                                                                           |     |                       |                     |
| Note: TGL 4, "nodule, 2 mm dia, pale" noted at trim, was not apparent microscopically. |     |                       |                     |

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 367

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 681

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901227

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Parathyroid Gland
* Salivary Glands	* Skin	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
Eye	Retina	Atrophy	Marked
		Cataract	Marked
[ Cataract TGLS = 1-16 ]			
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
[ Leukemia Mononuclear TGLS = 5-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-2 ]			
[ Leukemia Mononuclear TGLS = 7-13 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Mammary Gland		Carcinoma	
		Fibroadenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 367	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 681 <b>HISTO:</b> 9901227
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 2-17 ] [ Fibroadenoma TGLS = 3-18 ] Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 9-15 ] * Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Degeneration	Mild Minimal
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Spleen [ Leukemia Mononuclear TGLS = 4-12 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 368

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901228

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Basophilic Focus Hyperplasia Inflammation	Minimal Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular Fibroadenoma	Moderate Histiocyte, Minimal
* Mammary Gland			
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Stomach, Forestomach		Squamous Cell Carcinoma	
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 369

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901229

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
[ Infiltration Cellular TGLS = 2-3 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Cyst	Moderate
[ Cyst TGLS = 4-8 ]			
* Pancreas		Atrophy	Mild
* Pituitary Gland		Cyst	Moderate
[ Cyst TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 370      **TRT#:** 8      **SEX:** Female      **DAY ON TEST:** 730  
**DOSE:** 4.0%      **DISP:** Terminal Sacrifice      **HISTO:** 9901230

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular      \* Thymus

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Mixed Cell Focus	
		[ Basophilic Focus TGLS = 3-5 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 4-5 ]	
		[ Mixed Cell Focus TGLS = 2-5 ]	
* Lung	Bronchiole	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Pancreas		Atrophy	Mild
		Hyperplasia	Moderate
* Parathyroid Gland		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
		[ Hyperplasia TGLS = 1-9 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 370

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901230

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 371

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901231

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
Lymph Node	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Inflammation	Chronic Active, Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Note: TGL 5, "focus, 2 mm diam, pale" noted at trim, was not apparent microscopically.			
Lymph Node			
Note: TGL 4, "mediastinal, enlarged, 2x" noted at necropsy, was within normal limits microscopically.			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 371

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901231

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 372

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 542

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901232

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-13 ]			
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
	Centrilobular	Necrosis	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Degeneration	Moderate
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Minimal
* Pancreas		Atrophy	Mild
* Spleen		Hematopoietic Cell Proliferation	Marked
[ Hematopoietic Cell Proliferation TGLS = 2-12 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

- Clitoral Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 373

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 711

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901233

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Jejunum
* Thyroid Gland			

**OBSERVATIONS**

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
Note: TGL 3, "deformity" noted at necropsy, was not apparent microscopically. [ Basophilic Focus TGLS = 2-5+12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 374

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901234

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
[ Inflammation TGLS = 3-4 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 375      **TRT#:** 8      **SEX:** Female      **DAY ON TEST:** 731  
**DOSE:** 4.0%      **DISP:** Terminal Sacrifice      **HISTO:** 9901235

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Moderate
		Leukemia Mononuclear	

Note: TGL 9, "deformity, 9 x 6 x 2 mm" noted at necropsy, was normal variation in lobar morphology.

[ Basophilic Focus TGLS = 8-5 ]  
[ Hepatodiaphragmatic Nodule TGLS = 6-12 ]  
[ Leukemia Mononuclear TGLS = 7-5 ]

* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
		[ Necrosis TGLS = 10-17 ]	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
		[ Cyst TGLS = 3-8 ]	
* Pancreas		Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 375	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 731 <b>HISTO:</b> 9901235
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Hyperplasia TGLS = 1-9 ]	Pars Distalis	Hyperplasia	Minimal
* Spleen [ Inflammation TGLS = 4,5-14+15 ]		Inflammation Leukemia Mononuclear	Granulomatous, Marked
* Thyroid Gland * Uterus [ Polyp Stromal TGLS = 2-16 ]	C Cell	Hyperplasia Polyp Stromal	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 376

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901236

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Bronchiole	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 4-13 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 376

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901236

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 377

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 4.0%

DISP: Terminal Sacrifice

HISTO: 9901237

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Histiocytic, Focal, Minimal
	[ Basophilic Focus TGLS = 2-5 ]		
	[ Hepatodiaphragmatic Nodule TGLS = 1-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Carcinoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 378	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 533 <b>HISTO:</b> 9901238
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Liver	* Nose	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Uterus

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**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Thymus
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**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Pancreas
* Pituitary Gland	* Spleen	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

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**OBSERVATIONS**

* Liver			
Note: TGL 4, "nodule, 5 x 7 mm" noted at trim, was not apparent microscopically.			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Mesentery		Sarcoma	
[ Sarcoma TGLS = 2-12 ]			
* Ovary		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 1-14+15 ]			
Peritoneum		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 3-13 ]			

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**PRIMARY CAUSE OF DEATH** - Mesentery Sarcoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 379	<b>TRT#:</b> 8	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 536
	<b>DOSE:</b> 4.0%	<b>DISP:</b> Accidentally Killed	<b>HISTO:</b> 9901239

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

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**MISSING**

\* Lymph Node, Mandibular

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**INSUFFICIENT TISSUE**

\* Urinary Bladder

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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 1-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Uterus		Polyp Stromal	

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**PRIMARY CAUSE OF DEATH** - UNCERTAIN

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 380

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 597

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901240

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
	Centrilobular	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-5 ]	Necrosis	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
	[ Necrosis TGLS = 3-12 ]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Degeneration	Moderate
		Thrombosis	Mild
* Ovary		Cyst	Mild
	[ Cyst TGLS = 4-8 ]		
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
	Note: TGL 5, "nodule, 2 mm dia, red" noted at necropsy, was not apparent microscopically.		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Stomach, Glandular		Necrosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 380

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 597

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901240

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 6-13 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 381      **TRT#:** 8      **SEX:** Female      **DAY ON TEST:** 730  
**DOSE:** 4.0%      **DISP:** Terminal Sacrifice      **HISTO:** 9901241

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-13 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Mild
[ Basophilic Focus TGLS = 4-5 ]			
[ Hepatodiaphragmatic Nodule TGLS = 5-12 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-15 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-9+1 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth		Inflammation	Chronic Active, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 381

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901241

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 382

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901242

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 383

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 577

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901243

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Kidney [ Nephropathy TGLS = 5-6 ]		Nephropathy	Moderate
* Liver [ Mixed Cell Focus TGLS = 6-12 ]		Basophilic Focus Inflammation Inflammation Mixed Cell Focus	Histiocytic, Focal, Mild Granulomatous, Focal, Minimal
* Lung Note: TGL 4, "discoloration, red" noted at necropsy, was not apparent microscopically.		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland [ Adenoma TGLS = 2-9 ]	Pars Distalis	Adenoma	
* Stomach, Forestomach [ Ulcer TGLS = 7-9 ]		Ulcer	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 384

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901244

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Clitoral Gland		Hyperplasia	Mild
* Heart		Leukemia Mononuclear	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 384

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901244

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Spleen

Leukemia Mononuclear

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 385

TRT#: 8

SEX: Female

DAY ON TEST: 582

DOSE: 4.0%

DISP: Natural Death

HISTO: 9901245

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Heart	* Mammary Gland
* Salivary Glands	* Skin		

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

\* Liver

Note: TGL 2, "deformity, 5 x 5 x 3 mm" noted at necropsy, was not apparent microscopically.

\* Spleen

Note: TGL 1, "enlarged, 60 x 20 x 10 mm" noted at necropsy was probably due to mononuclear cell leukemia, but that diagnosis was obscured by post mortem autolysis.

**PRIMARY CAUSE OF DEATH**

- UNCERTAIN

Animal Note: COD was probably mononuclear cell leukemia; however, that determination was precluded by the degree of post mortem autolysis.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 386

TRT#: 8

SEX: Female

DAY ON TEST: 626

DOSE: 4.0%

DISP: Moribund Sacrifice

HISTO: 9901246

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Clitoral GI			
Note: TGL 2, "enlarged, 3x, yellow/green" noted at necropsy, was not apparent microscopically.			
* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
		Inflammation	Histiocytic, Focal, Minimal
		Inflammation	Granulomatous, Focal, Minimal
[ Basophilic Focus TGLS = 4,5-13+14 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
	Olfactory Epi	Degeneration	Moderate
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Moderate
[ Hyperplasia TGLS = 6-9+15 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 387

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 597

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901247

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**OBSERVATIONS**

* Heart	Atrium	Thrombosis	Moderate
* Kidney		Hemangiosarcoma	
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Hemangiosarcoma TGLS = 2-6 ]			
* Liver		Basophilic Focus	
		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[ Fatty Change TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Degeneration	Moderate
		Thrombosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 387

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 597

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901247

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 388

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901248

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Clitoral Gland		Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-12 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Pancreas		Basophilic Focus	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 389

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 4.0%

DISP: Terminal Sacrifice

HISTO: 9901249

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Bone                      | * Bone Marrow            | * Brain                    |
| * Clitoral Gland          | * Esophagus                 | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | Lymph Node                  | * Lymph Node, Mesenteric | * Mammary Gland            |
| * Parathyroid Gland       | * Salivary Glands           | * Skin                   | * Spleen                   |
| * Stomach, Forestomach    | * Stomach, Glandular        | * Thymus                 | * Trachea                  |
| * Urinary Bladder         |                             |                          |                            |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                                                                                                    |                |                               |                             |
|----------------------------------------------------------------------------------------------------|----------------|-------------------------------|-----------------------------|
| * Adrenal Medulla                                                                                  |                | Hyperplasia                   | Mild                        |
| * Heart                                                                                            |                | Cardiomyopathy                | Minimal                     |
|                                                                                                    |                | Schwannoma Benign             |                             |
| * Kidney                                                                                           |                | Nephropathy                   | Mild                        |
| * Liver                                                                                            |                | Basophilic Focus              |                             |
|                                                                                                    |                | Clear Cell Focus              |                             |
|                                                                                                    |                | Eosinophilic Focus            |                             |
|                                                                                                    |                | Inflammation                  | Histiocytic, Focal, Minimal |
| [ Basophilic Focus TGLS = 3-5 ]                                                                    |                |                               |                             |
| * Lung                                                                                             |                | Infiltration Cellular         | Histiocyte, Minimal         |
|                                                                                                    |                | Inflammation                  | Chronic Active, Minimal     |
| Lymph Node                                                                                         |                |                               |                             |
| Note: TGL 4, "mediastinal, enlarged. 3x, tan" noted at necropsy, was not apparent microscopically. |                |                               |                             |
| * Nose                                                                                             | Respirat Epith | Accumulation, Hyaline Droplet | Moderate                    |
| * Ovary                                                                                            |                | Cyst                          | Mild                        |
| [ Cyst TGLS = 2-8 ]                                                                                |                |                               |                             |
| * Pancreas                                                                                         |                | Basophilic Focus              |                             |
| * Pituitary Gland                                                                                  | Pars Distalis  | Hyperplasia                   | Moderate                    |
| * Thyroid Gland                                                                                    | C Cell         | Hyperplasia                   | Minimal                     |
| * Uterus                                                                                           |                | Hyperplasia                   | Cystic, Moderate            |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05

**Test Type:** CHRONIC

**Route:** DOSED WATER

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Dipropylene glycol

**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014

**Time Report Requested:** 17:04:57

**First Dose M/F:** NA / NA

**Lab:** BAT

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**ANIMAL ID:** 389

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901249

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hyperplasia TGLS = 1-9 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 390

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901250

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Inflammation	Granulomatous, Focal, Mild
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 391

TRT#: 8

SEX: Female

DAY ON TEST: 730

DOSE: 4.0%

DISP: Terminal Sacrifice

HISTO: 9901251

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
		Leukemia Mononuclear	
[ Basophilic Focus TGLS = 3-5 ]			
[ Leukemia Mononuclear TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-2 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Inflammation	Granulomatous, Mild
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland		Angiectasis	Mild
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 391	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9901251
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Angiectasis TGLS = 5-9 ] * Spleen		Inflammation Leukemia Mononuclear	Granulomatous, Mild
[ Leukemia Mononuclear TGLS = 1-5 ] * Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 392

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901252

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Esophagus			
Note: There were sections of metazoan parasites in the distal esophageal lumen.			
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
[ Basophilic Focus TGLS = 1-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 393

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 729

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901253

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
			[ Fibroadenoma TGLS = 1,4-12+14 ]
Mesentery	Fat	Necrosis	Mild
			[ Necrosis TGLS = 3-13 ]
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
			[ Adenoma TGLS = 2-9 ]
* Stomach, Glandular		Mineralization	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 394

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901254

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
[ Basophilic Focus TGLS = 2-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-9 ]			

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 395

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 564

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901255

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Thyroid Gland	* Trachea
* Uterus			

**MISSING**

* Lymph Node, Mandibular	* Thymus
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**AUTO PRECLUDES DIAG.**

* Intestine Small, Ileum	* Intestine Small, Jejunum	* Urinary Bladder
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**OBSERVATIONS**

* Adrenal Cortex	Hyperplasia	Mild
* Kidney	Nephropathy	Minimal
* Liver	Hepatodiaphragmatic Nodule Inflammation	Histiocytic, Focal, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-5 ]		
* Lung	Infiltration Cellular	Histiocyte, Minimal
* Nose	Thrombosis	Mild
* Stomach, Glandular	Necrosis	Mild
[ Necrosis TGLS = 3-13 ]		
Tongue	Squamous Cell Carcinoma	
[ Squamous Cell Carcinoma TGLS = 1-12 ]		

**PRIMARY CAUSE OF DEATH**

- Tongue Squamous Cell Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>ANIMAL ID:</b> 396	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 694 <b>HISTO:</b> 9901256
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**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Inflammation	Granulomatous, Focal, Minimal
		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 1-13 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
Mesentery		Sarcoma	
[ Sarcoma TGLS = 3-16+17 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Degeneration	Marked
* Pancreas		Sarcoma	Metastatic (Mesentery)
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-9 ]			
Pleura		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 4-12 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Stomach, Forestomach		Sarcoma	Metastatic (Mesentery)
[ Sarcoma TGLS = 2-14+15 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Mesentery Sarcoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 397

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 652

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901257

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Mammary Gland	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone		Osteopetrosis	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-5 ]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	Moderate
		Leukemia Mononuclear	
	[ Cyst TGLS = 3-8 ]		
* Pancreas		Atrophy	Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-12 ]		

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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**ANIMAL ID:** 397

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 652

**DOSE:** 4.0%

**DISP:** Natural Death

**HISTO:** 9901257

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 398

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 725

**DOSE:** 4.0%

**DISP:** Moribund Sacrifice

**HISTO:** 9901258

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Trachea	* Urinary Bladder		

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-13 ]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 4-5 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
[ Leukemia Mononuclear TGLS = 6-2 ]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
Note: TGL 9, "mass, .7 x 1.2 cm" noted at trim, was actually mammary gland.			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 398	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 725 <b>HISTO:</b> 9901258
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Mammary Gland [ Fibroadenoma TGLS = 9-14 ]		Fibroadenoma	
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Moderate
* Ovary		Leukemia Mononuclear	
* Pituitary Gland [ Adenoma TGLS = 3-9 ]	Pars Distalis	Adenoma Leukemia Mononuclear	
* Spleen [ Leukemia Mononuclear TGLS = 2,8-5+12 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 399

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 730

**DOSE:** 4.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9901259

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Glandular	* Trachea	* Urinary Bladder

**MISSING**

\* Clitoral Gland

**OBSERVATIONS**

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
		Necrosis	Marked
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
Note: TGL 4, "nodule, 5 mm dia" noted at trim, was normal variation in lobar morphology. [ Leukemia Mononuclear TGLS = 2,3-5 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 5-14 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Ovary		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 88031-05  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Dipropylene glycol  
**CAS Number:** 25265-71-8

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 17:04:57  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 399	<b>TRT#:</b> 8 <b>DOSE:</b> 4.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 9901259
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 1-12 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Adenoma	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 88031-05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Dipropylene glycol

CAS Number: 25265-71-8

Date Report Requested: 10/21/2014

Time Report Requested: 17:04:57

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 400

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 4.0%

DISP: Terminal Sacrifice

HISTO: 9901260

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Basophilic Focus	
		Hyperplasia	Minimal
		Inflammation	Granulomatous, Focal, Minimal
		Inflammation	Histiocytic, Focal, Minimal
[ Basophilic Focus TGLS = 3-12 ]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Marked
* Ovary		Cyst	Moderate
[ Cyst TGLS = 1-8 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 4-9 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

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\*\* END OF REPORT \*\*

\* PROTOCOL REQUIRED TISSUE