

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

F1\_Rev.1\_RE

**NTP Study Number:** C08010  
**Lock Date:** 07/12/2011  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** NONE

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2,3-Pentanedione  
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Date Report Requested: 04/29/2016  
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First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62359

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* 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

* Lymph Node, Mandibular	* Mammary Gland
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OBSERVATIONS

* Harderian Gland		Hyperplasia	Minimal
* Kidney	Renal Tubule	Hyperplasia	Minimal
* Lung	Perivascular	Infiltration Cellular	Mononuclear CI, Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Testes		Edema	Minimal
* Thyroid Gland		Inflammation	Chronic, Minimal

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 2,3-Pentanedione  
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**Lab:** BNW

**ANIMAL ID:** 2

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62360

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | * Blood Vessel           | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis             | * Esophagus                |
| * Eye                     | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Kidney                    | * Liver                  | * Lymph Node, Bronchial    |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric    | * Nose                   | * Parathyroid Gland        |
| * Pituitary Gland         | * Preputial Gland           | * Prostate               | * Salivary Glands          |
| * Seminal Vesicle         | * Skin                      | * Stomach, Forestomach   | * Stomach, Glandular       |
| * Testes                  | * Thymus                    | * Thyroid Gland          | Trachea                    |
| * Urinary Bladder         |                             |                          |                            |

**MISSING**

- |                          |                 |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

**OBSERVATIONS**

- |                   |                |                       |                         |
|-------------------|----------------|-----------------------|-------------------------|
| * Harderian Gland |                | Concretion            |                         |
| * Larynx          |                | Inflammation          | Chronic Active, Minimal |
| * Lung            | Alveolar Epith | Hyperplasia           | Minimal                 |
|                   |                | Infiltration Cellular | Histiocyte, Minimal     |
|                   |                | Inflammation          | Eosinophil, Minimal     |
| * Pancreas        | Acinus         | Apoptosis             | Minimal                 |
|                   | Acinus         | Eosinophilic Focus    |                         |
| * Spleen          |                | Pigmentation          | Mild                    |
| Tooth             |                | Dysplasia             |                         |

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 Lab: BNW

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62361

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | * Blood Vessel           | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis             | * Esophagus                |
| * Eye                     | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Larynx                    | * Liver                  | * Lymph Node, Bronchial    |
| * Lymph Node, Mandibular  | * Lymph Node, Mediastinal   | * Pancreas               | * Parathyroid Gland        |
| * Pituitary Gland         | * Prostate                  | * Salivary Glands        | * Seminal Vesicle          |
| * Skin                    | * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   |
| Trachea                   | * Urinary Bladder           |                          |                            |

**MISSING**

- \* Mammary Gland

**OBSERVATIONS**

- |                          |  |                       |                         |
|--------------------------|--|-----------------------|-------------------------|
| * Harderian Gland        |  | Concretion            |                         |
| * Kidney                 |  | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung                   | Alveolar Epith<br>Perivascular                   | Hyperplasia           | Focal, Minimal          |
| * Lymph Node, Mesenteric |  | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose                   | Olfactory Epi<br>Respirat Epith<br>Vomeronas Org | Hyperplasia           | Histiocytic, Minimal    |
|                          |  | Atrophy               | Minimal                 |
|                          |  | Degeneration          | Mild                    |
| * Preputial Gland        |  | Inflammation          | Suppurative, Moderate   |
| * Spleen                 |  | Inflammation          | Chronic Active, Minimal |
| * Testes                 |  | Pigmentation          | Minimal                 |
| * Thyroid Gland          |  | Edema                 | Minimal                 |
|                          |  | Ultimobranchial Cyst  |                         |

\* PROTOCOL REQUIRED TISSUE

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 2,3-Pentanedione  
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 Lab: BNW

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62362

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                           |                             |                           |                            |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | * Blood Vessel            | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis              | * Esophagus                |
| * Eye                     | * Heart                     | * Intestine Large, Cecum  | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum  | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Larynx                    | * Liver                   | * Lung                     |
| * Lymph Node, Bronchial   | * Lymph Node, Mandibular    | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric   |
| * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands         | * Seminal Vesicle          |
| * Skin                    | * Spleen                    | * Stomach, Forestomach    | * Stomach, Glandular       |
| * Thymus                  | * Thyroid Gland             | Trachea                   | * Urinary Bladder          |

**MISSING**

- \* Mammary Gland

**OBSERVATIONS**

- |                   |               |              |                         |
|-------------------|---------------|--------------|-------------------------|
| * Harderian Gland |               | Hyperplasia  | Minimal                 |
|                   |               | Inflammation | Chronic Active, Minimal |
| * Kidney          |               | Nephropathy  | Minimal                 |
| * Nose            | Olfactory Epi | Metaplasia   | Respiratory, Minimal    |
| * Pancreas        |               | Inflammation | Chronic Active, Minimal |
| * Preputial Gland |               | Inflammation | Chronic Active, Minimal |
| * Prostate        |               | Inflammation | Chronic Active, Minimal |
| * Testes          |               | Edema        | Minimal                 |

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 Lab: BNW

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62363

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                           |                            |                           |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla         | * Blood Vessel             | * Bone                    |
| * Bone Marrow               | * Brain                   | * Epididymis               | * Esophagus               |
| * Eye                       | * Heart                   | * Intestine Large, Cecum   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum  | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Kidney                    | * Larynx                  | * Liver                    | * Lymph Node, Bronchial   |
| * Lymph Node, Mandibular    | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric   | * Pancreas                |
| * Parathyroid Gland         | * Pituitary Gland         | * Prostate                 | * Salivary Glands         |
| * Seminal Vesicle           | * Skin                    | * Stomach, Forestomach     | * Stomach, Glandular      |
| * Testes                    | * Thymus                  | * Thyroid Gland            | Trachea                   |
| * Urinary Bladder           |                           |                            |                           |

MISSING

- \* Mammary Gland

OBSERVATIONS

- |                          |                                |                       |                         |
|--------------------------|--------------------------------|-----------------------|-------------------------|
| * Harderian Gland        |                                | Concretion            |                         |
| * Intestine Large, Colon | Epithelium                     | Degeneration          | Minimal                 |
| * Lung                   |                                | Infiltration Cellular | Histiocyte, Minimal     |
|                          |                                | Inflammation          | Eosinophil, Minimal     |
| * Nose                   | Olfactory Epi                  | Degeneration          | Minimal                 |
|                          | Nasopharyn Dct                 | Mineralization        | Minimal                 |
|                          | Lamina Propria, Nasopharyn Dct | Mineralization        | Minimal                 |
| * Preputial Gland        |                                | Inflammation          | Chronic Active, Minimal |
| * Spleen                 |                                | Pigmentation          | Minimal                 |

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 2,3-Pentanedione  
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**Lab:** BNW

**ANIMAL ID:** 6

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62364

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Prostate	* 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**

* Kidney		Nephropathy	Minimal
* Lung		Infiltration Cellular	Histiocyte, Mild
		Metaplasia	Osseous, Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Pituitary Gland		Cyst	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Testes		Edema	Minimal

\* PROTOCOL REQUIRED TISSUE

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**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

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**Lab:** BNW

**ANIMAL ID:** 7

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62365

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Pancreas
* Parathyroid Gland	* 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		Accessory Adrenal Cortical Nodule	
* Harderian Gland		Inflammation	Chronic Active, Minimal
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Liver		Infiltration Cellular	Mixed Cell, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Hyperplasia	Histiocytic, Minimal
* Nose	Olfactory Epi	Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Prostate		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Minimal
* Testes		Edema	Minimal
* Thyroid Gland		Infiltration Cellular	Mononuclear CI, Minimal
Tooth		Dysplasia	



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2,3-Pentanedione  
**CAS Number:** 600-14-6

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**Lab:** BNW

**ANIMAL ID:** 8

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62366

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* 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

**MISSING**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

* Harderian Gland	Hyperplasia	Minimal
* Kidney	Nephropathy	Minimal
* Testes	Edema	Minimal

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**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

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**Lab:** BNW

**ANIMAL ID:** 9

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62367

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | * Blood Vessel             | * Bone                    |
| * Bone Marrow               | * Brain                  | * Epididymis               | * Esophagus               |
| * Eye                       | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Lymph Node, Bronchial  | * Lymph Node, Mandibular   | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric    | * Mammary Gland          | * Nose                     | * Parathyroid Gland       |
| * Pituitary Gland           | * Salivary Glands        | * Seminal Vesicle          | * Skin                    |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Testes                   | * Thymus                  |
| Trachea                     | * Urinary Bladder        |                            |                           |

**OBSERVATIONS**

- |                   |              |                       |                         |
|-------------------|--------------|-----------------------|-------------------------|
| * Harderian Gland |              | Concretion            |                         |
| * Heart           |              | Cardiomyopathy        | Minimal                 |
| * Kidney          | Renal Tubule | Casts Protein         | Minimal                 |
| * Liver           |              | Infiltration Cellular | Mixed Cell, Minimal     |
| * Lung            |              | Infiltration Cellular | Histiocyte, Minimal     |
|                   |              | Inflammation          | Eosinophil, Minimal     |
| * Pancreas        |              | Atrophy               | Minimal                 |
| * Preputial Gland |              | Inflammation          | Chronic Active, Minimal |
| * Prostate        |              | Inflammation          | Chronic Active, Mild    |
| * Spleen          |              | Pigmentation          | Minimal                 |
| * Thyroid Gland   |              | Ultimobranchial Cyst  |                         |

\* PROTOCOL REQUIRED TISSUE

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Lab: BNW

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	Trachea
* Urinary Bladder			

MISSING

\* Mammary Gland

OBSERVATIONS

* Harderian Gland		Concretion	
		Inflammation	Chronic Active, Minimal
* Kidney	Cortex	Cyst	
* Lymph Node, Mesenteric		Hyperplasia	Histiocytic, Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Mild
* Thyroid Gland		Ultimobranchial Cyst	

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Date Report Requested: 04/29/2016  
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First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 201

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 6.25 ppm

DISP: Terminal Sacrifice

HISTO: 62459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Eye

Nose

Trachea

OBSERVATIONS

\* Larynx

Respirat Epith

Hyperplasia

Minimal

Respirat Epith

Metaplasia

Squamous, Minimal

Lung

Inflammation

Eosinophil, Minimal

Metaplasia

Osseous, Minimal

Skin

Inflammation

Acute, Minimal

[ Inflammation TGLs = 1-15 ]

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**Species/Strain:** RATS/Wistar Han

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**Lab:** BNW

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**ANIMAL ID:** 202

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62460

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

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**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
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**Lab:** BNW

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**ANIMAL ID:** 203

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62461

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

Nose

Nasolacrim Dct

Hyperplasia  
Inflammation

Lymphoid, Minimal  
Chronic Active, Mild

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**Experiment Number:** 08010 - 01  
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**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 204

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62462

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 205

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62463

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 206

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62464

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 207

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62465

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Trachea

---

**OBSERVATIONS**

Lung

Perivascular

Infiltration Cellular

Histiocyte, Minimal

Infiltration Cellular

Mononuclear CI, Minimal

Inflammation

Eosinophil, Minimal

Metaplasia

Osseous, Minimal

Nose

Olfactory Epi

Atrophy

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 208

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62466

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

---

**OBSERVATIONS**

Trachea

Epithelium

Regeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 209

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62467

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

Eye

Retina

Atrophy

Moderate

Lens

Cataract

Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 210

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62468

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 401

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62439

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 402

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62440

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

\* Nose

Hyperplasia

Lymphoid, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 403

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62441

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

\* Nose

Olfactory Epi

Metaplasia

Respiratory, Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 404

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62442

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

\* Nose

Trachea

---

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 405

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 12.5 ppm

DISP: Terminal Sacrifice

HISTO: 62443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Eye

\* Larynx

Lung

Trachea

OBSERVATIONS

Lymph Node, Mesenteric  
[ Hemorrhage TGLs = 1-15 ]

Hemorrhage

Mild

\* Nose

Respirat Epith

Metaplasia

Squamous, Minimal

Tooth

Peridont Tiss

Abscess

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 406

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62444

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

\* Nose

---

**OBSERVATIONS**

Lung

Inflammation

Chronic Active, Minimal

Trachea

Epithelium

Regeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 407

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62445

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

Lung

\* Nose

Trachea

---

**OBSERVATIONS**

Eye

Conjunctiva

Inflammation

Acute, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 408

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62446

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Nose

Trachea

---

**INSUFFICIENT TISSUE**

Eye

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

Lung

Metaplasia

Osseous, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 409

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62447

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

Eye

Conjunctiva

Inflammation

Acute, Minimal

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 410

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62448

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

\* Nose

Olfactory Epi

Metaplasia

Respiratory, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 601

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62419

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Trachea

---

**OBSERVATIONS**

Lung

\* Nose

Olfactory Epi

Respirat Epith

Metaplasia

Degeneration

Hyperplasia

Inflammation

Osseous, Minimal

Minimal

Minimal

Suppurative, Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 602

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62420

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

Lung

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 603

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62421

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 604

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62422

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

Lung

\* Trachea

---

**OBSERVATIONS**

\* Nose

Olfactory Epi

Atrophy

Minimal

Respirat Epith

Hyperplasia

Minimal

Olfactory Epi

Metaplasia

Respiratory, Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 606

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62424

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Hyperplasia

Minimal

Lung

Inflammation

Eosinophil, Minimal

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 607

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62425

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Trachea

---

**OBSERVATIONS**

* Eye	Retina	Dysplasia	
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Minimal
* Nose	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 608

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62426

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Trachea

**OBSERVATIONS**

* Eye	Retina	Dysplasia	
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
Lung		Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 609

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62427

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

Lung

Metaplasia

Osseous, Minimal

\* Nose

Olfactory Epi

Atrophy

Minimal

Respirat Epith

Hyperplasia

Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 610

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62428

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

Metaplasia

Osseous, Minimal

Hyperplasia

Minimal

---

\* Nose

Respirat Epith

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 801	TRT#: 9 DOSE: 50 ppm	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 62399
<b>OBSERVATIONS</b>			
* Eye	Conjunctiva	Inflammation	Acute, Minimal
* Larynx	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Mild
	Bronchus, Epithelium	Regeneration	Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 802

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

OBSERVATIONS

* Larynx	Respirat Epith	Hyperplasia Inflammation	Minimal Suppurative, Minimal
	Respirat Epith	Metaplasia Infiltration Cellular	Squamous, Mild Histiocyte, Minimal
* Lung			
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia Inflammation	Mild Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Minimal
* Trachea		Inflammation	Suppurative, Moderate
	Epithelium	Regeneration	Moderate

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 803

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

OBSERVATIONS

* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 804

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

OBSERVATIONS

Adrenal Cortex		Inflammation	Lymphoid, Mild
Kidney	Pelvis	Dilatation	Minimal
[ Dilatation TGLs = 1-7 ]			
* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Mineralization	Focal, Minimal
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Hyperplasia	Lymphoid, Mild
		Inflammation	Suppurative, Mild
* Trachea	Respirat Epith	Metaplasia	Squamous, Minimal
	Epithelium	Regeneration	Mild

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 805

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lung

OBSERVATIONS

* Eye	Retina	Atrophy	Moderate
	Cornea	Inflammation	Acute, Minimal
	Antr Chamber	Inflammation	Acute, Minimal
	Iris	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Minimal
* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 806

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

\* Lung

OBSERVATIONS

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

\* Nose

Turbinate

Atrophy

Minimal

Olfactory Epi

Atrophy

Minimal

Olfactory Epi

Degeneration

Mild

Respirat Epith

Hyperplasia

Mild

Hyperplasia

Lymphoid, Minimal

Inflammation

Suppurative, Mild

Respirat Epith

Metaplasia

Squamous, Minimal

Olfactory Epi

Metaplasia

Respiratory, Minimal

Respirat Epith

Necrosis

Minimal

\* Trachea

Epithelium

Regeneration

Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 807

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Trachea

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Mild
	Cornea	Ulcer	Mild
* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 808

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 50 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62406

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lung

\* Trachea

**OBSERVATIONS**

\* Eye

Cornea

Inflammation

Acute, Minimal

Iris

Inflammation

Acute, Minimal

Ciliary Body

Inflammation

Acute, Minimal

Antr Chamber

Inflammation

Acute, Minimal

[ Inflammation TGLs = 1-13 ]

\* Larynx

Respirat Epith

Metaplasia

Squamous, Mild

Respirat Epith

Regeneration

Minimal

\* Nose

Olfactory Epi

Atrophy

Minimal

Olfactory Epi

Degeneration

Mild

Respirat Epith

Hyperplasia

Mild

Hyperplasia

Lymphoid, Minimal

Inflammation

Suppurative, Mild

Respirat Epith

Metaplasia

Squamous, Mild

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 809

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

OBSERVATIONS

* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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<b>ANIMAL ID:</b> 810	<b>TRT#:</b> 9	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 93
	<b>DOSE:</b> 50 ppm	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 62408

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**OBSERVATIONS**

* Eye		Phthisis Bulbi	
	[ Phthisis Bulbi TGLs = 1-13 ]		
* Larynx	Respirat Epith	Metaplasia	Squamous, Moderate
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1001

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla           | * Blood Vessel           | * Bone                     | * Bone Marrow             |
| * Brain                     | * Epididymis             | * Esophagus                | * Eye                     |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Kidney                    | * Liver                  | * Lymph Node, Bronchial    | * Mammary Gland           |
| * Pancreas                  | * Parathyroid Gland      | * Pituitary Gland          | * Prostate                |
| * Salivary Glands           | * Seminal Vesicle        | * Skin                     | * Stomach, Forestomach    |
| * Stomach, Glandular        | * Testes                 | * Thymus                   | * Thyroid Gland           |
| * Urinary Bladder           |                          |                            |                           |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                           |                        |                                   |                       |
|---------------------------|------------------------|-----------------------------------|-----------------------|
| * Adrenal Cortex          |                        | Accessory Adrenal Cortical Nodule |                       |
| * Harderian Gland         |                        | Concretion                        |                       |
| * Larynx                  | Squam Epithel          | Hyperplasia                       | Minimal               |
|                           | Respirat Epith         | Metaplasia                        | Squamous, Moderate    |
| * Lung                    | Bronchiole, Epithelium | Hyperplasia                       | Minimal               |
|                           | Bronchus, Epithelium   | Hyperplasia                       | Mild                  |
|                           |                        | Inflammation                      | Eosinophil, Minimal   |
|                           | Bronchus, Epithelium   | Metaplasia                        | Squamous, Minimal     |
|                           | Bronchus, Epithelium   | Regeneration                      | Marked                |
| * Lymph Node, Mediastinal |                        | Pigmentation                      | Mild                  |
| * Lymph Node, Mesenteric  |                        | Hyperplasia                       | Histiocytic, Minimal  |
| * Nose                    | Turbinate              | Atrophy                           | Mild                  |
|                           | Olfactory Epi          | Atrophy                           | Minimal               |
|                           | Respirat Epith         | Hyperplasia                       | Moderate              |
|                           |                        | Hyperplasia                       | Lymphoid, Minimal     |
|                           |                        | Inflammation                      | Suppurative, Moderate |
|                           | Respirat Epith         | Metaplasia                        | Squamous, Mild        |
|                           | Olfactory Epi          | Metaplasia                        | Respiratory, Minimal  |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1001

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62379

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Necrosis	Moderate
	Respirat Epith	Regeneration	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Mild
Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Necrosis	Minimal
	Epithelium	Regeneration	Mild

---

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1002

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62380

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Urinary Bladder			

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Hyperplasia	Mild
	Respirat Epith	Metaplasia	Squamous, Moderate
	Respirat Epith	Necrosis	Minimal
	Respirat Epith	Regeneration	Minimal
* Lung	Bronchiole, Epithelium	Hyperplasia	Mild
	Bronchus, Epithelium	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Mild
	Bronchus, Epithelium	Regeneration	Moderate
* Lymph Node, Mediastinal		Pigmentation	Minimal
* Lymph Node, Mesenteric		Hyperplasia	Histiocytic, Minimal
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
		Foreign Body	
	Respirat Epith	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 1002

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62380

**ORGAN AND ACCOUNTABLE SITE STATUS**

		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Moderate
* Thyroid Gland		Ultimobranchial Cyst	
Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Regeneration	Mild

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1003

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62381

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | * Blood Vessel              | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lymph Node, Bronchial  |
| * Lymph Node, Mandibular   | * Pancreas                | * Pituitary Gland           | * Preputial Gland        |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                   |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          |
| * Urinary Bladder          |                           |                             |                          |

**MISSING**

- |                 |                     |
|-----------------|---------------------|
| * Mammary Gland | * Parathyroid Gland |
|-----------------|---------------------|

**OBSERVATIONS**

- |                           |                                   |                       |                         |
|---------------------------|-----------------------------------|-----------------------|-------------------------|
| * Kidney                  |                                   | Infiltration Cellular | Mononuclear CI, Minimal |
| * Larynx                  | Squam Epithel                     | Hyperplasia           | Minimal                 |
|                           |                                   | Inflammation          | Chronic Active, Minimal |
|                           | Respirat Epith                    | Metaplasia            | Squamous, Moderate      |
| * Lung                    |                                   | Fibrosis              | Focal, Minimal          |
|                           | Bronchiole, Epithelium            | Hyperplasia           | Moderate                |
|                           | Bronchus, Epithelium              | Hyperplasia           | Mild                    |
|                           |                                   | Infiltration Cellular | Histiocyte, Minimal     |
|                           |                                   | Inflammation          | Eosinophil, Moderate    |
|                           | Bronchus, Epithelium, Goblet Cell | Metaplasia            | Minimal                 |
|                           | Bronchus, Epithelium              | Regeneration          | Marked                  |
| * Lymph Node, Mediastinal |                                   | Pigmentation          | Mild                    |
| * Lymph Node, Mesenteric  |                                   | Hyperplasia           | Histiocytic, Minimal    |
| * Nose                    | Turbinate                         | Atrophy               | Mild                    |
|                           | Olfactory Epi                     | Atrophy               | Minimal                 |
|                           | Respirat Epith                    | Hyperplasia           | Moderate                |
|                           |                                   | Inflammation          | Suppurative, Moderate   |
|                           | Respirat Epith                    | Metaplasia            | Squamous, Mild          |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1003

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62381

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
* Spleen		Pigmentation	Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Moderate
		Inflammation	Acute, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
	Epithelium	Regeneration	Mild

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1004

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | * Blood Vessel           | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis             | * Esophagus                |
| * Eye                     | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Kidney                    | * Liver                  | * Pancreas                 |
| * Parathyroid Gland       | * Pituitary Gland           | * Preputial Gland        | * Prostate                 |
| * Salivary Glands         | * Seminal Vesicle           | * Skin                   | * Stomach, Forestomach     |
| * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          | * Urinary Bladder          |

MISSING

- \* Mammary Gland

OBSERVATIONS

- \* Eye
  - Note: TGL= 1-NCL per NTP pathologist.
- \* Harderian Gland
- \* Larynx
  - Respirat Epith
    - Concretion
    - Hyperplasia
    - Inflammation
    - Metaplasia
  - Respirat Epith
    - Mild
    - Chronic Active, Minimal
    - Squamous, Moderate
- \* Lung
  - Bronchiole, Epithelium
    - Hyperplasia
    - Hyperplasia
    - Infiltration Cellular
    - Inflammation
    - Regeneration
    - Pigmentation
  - Bronchus, Epithelium
    - Mild
    - Minimal
    - Histiocyte, Minimal
    - Eosinophil, Moderate
    - Moderate
    - Minimal
    - Plasma Cell, Mild
    - Moderate
    - Histiocytic, Minimal
  - Bronchus, Epithelium
    - Moderate
    - Minimal
    - Plasma Cell, Mild
    - Moderate
    - Histiocytic, Minimal
- \* Lymph Node, Bronchial
- \* Lymph Node, Mandibular
- \* Lymph Node, Mediastinal
- \* Lymph Node, Mesenteric
- \* Nose
  - Turbinate
    - Atrophy
    - Atrophy
    - Degeneration
  - Olfactory Epi
    - Mild
    - Minimal
  - Olfactory Epi
    - Mild
  - Respirat Epith
    - Moderate
    - Hyperplasia

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 1004

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62382

**ORGAN AND ACCOUNTABLE SITE STATUS**

		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
	Olfactory Epi	Squamous Metaplasia	Minimal
* Spleen		Pigmentation	Moderate
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Regeneration	Moderate

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1005

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62383

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Urinary Bladder		

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Heart		Cardiomyopathy	Minimal
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
* Lung	Bronchiole, Epithelium	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Minimal
	Bronchus, Epithelium	Metaplasia	Squamous, Mild
	Bronchus, Epithelium	Regeneration	Mild
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Hyperplasia	Lymphoid, Mild
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Minimal
	Respirat Epith	Regeneration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1005

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62383

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas	Acinus	Apoptosis	Mild
		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Metaplasia	Squamous, Mild
	Epithelium	Regeneration	Moderate

---

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1006

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* 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
* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Mild
	Cornea	Neovascularization	Minimal
	Cornea, Epithelium	Vacuolation	Mild
	[ Inflammation TGLs = 1-13 ]		
* Harderian Gland		Inflammation	Chronic Active, Minimal
* Kidney		Nephropathy	Minimal
* Larynx	Respirat Epith	Metaplasia	Squamous, Moderate
* Lung	Bronchiole, Epithelium	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Mild
	Bronchus, Epithelium	Regeneration	Mild
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Mild
		Hyperplasia	Lymphoid, Mild
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1006

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62384

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Preputial Gland		Inflammation	Chronic Active, Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Minimal
		Inflammation	Acute, Minimal
	Epithelium	Regeneration	Moderate

---

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1007

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                            |                           |                             |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla         | * Blood Vessel             | * Bone                    | * Bone Marrow               |
| * Brain                   | * Epididymis               | * Esophagus               | * Eye                       |
| * Intestine Large, Cecum  | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum  | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     |
| * Lymph Node, Mediastinal | * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           |
| * Preputial Gland         | * Salivary Glands          | * Seminal Vesicle         | * Skin                      |
| * Stomach, Forestomach    | * Stomach, Glandular       | * Testes                  | * Thymus                    |
| * Thyroid Gland           | * Urinary Bladder          |                           |                             |

MISSING

- \* Mammary Gland

OBSERVATIONS

- |                          |                           |                       |                      |
|--------------------------|---------------------------|-----------------------|----------------------|
| * Adrenal Cortex         |                           | Hypertrophy           | Minimal              |
| * Harderian Gland        |                           | Concretion            |                      |
| * Heart                  |                           | Cardiomyopathy        | Minimal              |
| * Kidney                 | Pelvis                    | Dilatation            | Minimal              |
|                          | [ Dilatation TGLs = 1-7 ] |                       |                      |
| * Larynx                 | Squam Epithel             | Hyperplasia           | Minimal              |
|                          | Respirat Epith            | Metaplasia            | Squamous, Moderate   |
|                          | Respirat Epith            | Regeneration          | Minimal              |
| * Lung                   | Bronchiole, Epithelium    | Hyperplasia           | Mild                 |
|                          | Bronchus, Epithelium      | Hyperplasia           | Mild                 |
|                          |                           | Infiltration Cellular | Histiocyte, Mild     |
|                          |                           | Inflammation          | Eosinophil, Minimal  |
|                          | Bronchus, Epithelium      | Metaplasia            | Squamous, Minimal    |
| * Lymph Node, Bronchial  |                           | Hyperplasia           | Plasma Cell, Minimal |
| * Lymph Node, Mandibular |                           | Hyperplasia           | Plasma Cell, Mild    |
| * Lymph Node, Mesenteric |                           | Hyperplasia           | Histiocytic, Minimal |
| * Nose                   | Turbinate                 | Atrophy               | Mild                 |
|                          | Olfactory Epi             | Atrophy               | Minimal              |
|                          | Respirat Epith            | Hyperplasia           | Moderate             |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1007

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62385

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Moderate
	Respirat Epith	Regeneration	Mild
* Prostate		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Mild
Trachea	Epithelium	Regeneration	Marked

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1008

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	

MISSING

\* Mammary Gland

OBSERVATIONS

* Eye	Cornea, Epithelium	Hyperplasia	Moderate
	Cornea	Inflammation	Acute, Minimal
	Cornea, Epithelium	Vacuolation	Moderate
	[ Inflammation TGLs = 1-13 ]		
* Kidney	Pelvis	Dilatation	Minimal
	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Pelvis	Inflammation	Chronic Active, Minimal
		Nephropathy	Mild
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
* Lung	Bronchiole, Epithelium	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Infiltration Cellular	Polymorphnuclr, Minimal
		Inflammation	Eosinophil, Moderate
	Bronchus, Epithelium	Regeneration	Moderate
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 1008

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62386

**ORGAN AND ACCOUNTABLE SITE STATUS**

		Hyperplasia	Lymphoid, Mild
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Moderate
		Inflammation	Acute, Minimal
	Epithelium	Metaplasia	Squamous, Mild
	Epithelium	Regeneration	Moderate

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1009

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | * Blood Vessel             | * 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      |
| * Kidney                    | * Liver                  | * Lymph Node, Bronchial    | * Lymph Node, Mandibular  |
| * Lymph Node, Mediastinal   | * Lymph Node, Mesenteric | * Parathyroid Gland        | * Pituitary Gland         |
| * Prostate                  | * Salivary Glands        | * Seminal Vesicle          | * Spleen                  |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           |
| * Urinary Bladder           |                          |                            |                           |

OBSERVATIONS

- |                   |                        |                       |                         |
|-------------------|------------------------|-----------------------|-------------------------|
| * Eye             | Retina                 | Dysplasia             |                         |
| * Harderian Gland |                        | Hyperplasia           | Minimal                 |
| * Larynx          |                        | Inflammation          | Chronic Active, Minimal |
|                   | Respirat Epith         | Metaplasia            | Squamous, Moderate      |
|                   | Respirat Epith         | Necrosis              | Minimal                 |
| * Lung            | Bronchiole, Epithelium | Hyperplasia           | Mild                    |
|                   |                        | Infiltration Cellular | Histiocyte, Mild        |
|                   |                        | Inflammation          | Eosinophil, Minimal     |
|                   | Bronchus, Epithelium   | Regeneration          | Mild                    |
| * Mammary Gland   |                        | Hyperplasia           | Minimal                 |
| * Nose            | Turbinate              | Atrophy               | Mild                    |
|                   | Olfactory Epi          | Atrophy               | Minimal                 |
|                   | Nasopharyn Dct         | Foreign Body          |                         |
|                   | Respirat Epith         | Hyperplasia           | Moderate                |
|                   |                        | Inflammation          | Suppurative, Moderate   |
|                   | Respirat Epith         | Metaplasia            | Squamous, Mild          |
|                   | Olfactory Epi          | Metaplasia            | Respiratory, Minimal    |
|                   | Respirat Epith         | Necrosis              | Mild                    |
|                   | Respirat Epith         | Regeneration          | Minimal                 |
|                   | Olfactory Epi          | Squamous Metaplasia   | Minimal                 |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1009

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62387

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas		Atrophy	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Skin		Inflammation	Acute, Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Minimal
	Epithelium	Regeneration	Moderate

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**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 1010

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62388

**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      | * Kidney                    |
| * Liver                  | * Lymph Node, Mandibular   | * Lymph Node, Mediastinal | * Pancreas                  |
| * Parathyroid Gland      | * Pituitary Gland          | * Salivary Glands         | * Seminal Vesicle           |
| * Skin                   | * Stomach, Forestomach     | * Stomach, Glandular      | * Thymus                    |
| * Thyroid Gland          | * Urinary Bladder          |                           |                             |

**MISSING**

- |                         |                 |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

**OBSERVATIONS**

- |                          |                              |                       |                         |
|--------------------------|------------------------------|-----------------------|-------------------------|
| * Eye                    | Cornea                       | Inflammation          | Acute, Minimal          |
|                          | Cornea                       | Neovascularization    | Minimal                 |
|                          | [ Inflammation TGLs = 1-13 ] |                       |                         |
| * Harderian Gland        |                              | Concretion            |                         |
| * Heart                  |                              | Cardiomyopathy        | Minimal                 |
| * Larynx                 | Squam Epithel                | Hyperplasia           | Mild                    |
|                          |                              | Inflammation          | Chronic Active, Minimal |
|                          | Respirat Epith               | Metaplasia            | Squamous, Moderate      |
|                          | Respirat Epith               | Ulcer                 | Minimal                 |
| * Lung                   | Bronchiole, Epithelium       | Hyperplasia           | Mild                    |
|                          |                              | Infiltration Cellular | Histiocyte, Mild        |
|                          |                              | Inflammation          | Eosinophil, Moderate    |
|                          | Bronchus, Epithelium         | Regeneration          | Mild                    |
| * Lymph Node, Mesenteric |                              | Hyperplasia           | Histiocytic, Minimal    |
| * Nose                   | Turbinate                    | Atrophy               | Mild                    |
|                          | Olfactory Epi                | Atrophy               | Minimal                 |
|                          | Olfactory Epi                | Degeneration          | Mild                    |
|                          | Respirat Epith               | Hyperplasia           | Moderate                |
|                          |                              | Inflammation          | Suppurative, Moderate   |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1010

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62388

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Prostate		Inflammation	Chronic Active, Minimal
* Spleen		Pigmentation	Minimal
* Testes		Edema	Minimal
Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Regeneration	Moderate

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**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 101

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62369

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Esophagus	* Eye	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Minimal
* Brain	Ventricle	Dilatation	Mild
* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Harderian Gland		Concretion	
* Liver		Infiltration Cellular	Mononuclear CI, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Bronchial		Pigmentation	Moderate
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Minimal
* Lymph Node, Mediastinal		Pigmentation	Minimal
* Nose	Respirat Epith	Hyperplasia	Minimal
* Spleen		Pigmentation	Moderate



Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 102

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Larynx	* Liver
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

\* Harderian Gland

Hyperplasia

Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62371

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

\* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex	Accessory Adrenal Cortical Nodule	
* Harderian Gland	Concretion	
* Liver	Infiltration Cellular	Mononuclear CI, Minimal
* Lung	Infiltration Cellular	Histiocyte, Minimal
	Inflammation	Eosinophil, Minimal
* Lymph Node, Bronchial	Pigmentation	Moderate
* Lymph Node, Mandibular	Hyperplasia	Plasma Cell, Moderate
* Lymph Node, Mediastinal	Pigmentation	Moderate
* Lymph Node, Mesenteric	Hyperplasia	Histiocytic, Minimal
* Spleen	Pigmentation	Moderate
* Thymus	Ectopic Parathyroid Gland	

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 104

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62372

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla        | * Blood Vessel             | * Bone                    | * Bone Marrow               |
| * Brain                  | * Esophagus                | * Eye                     | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    |
| * Larynx                 | * Liver                    | * Lymph Node, Bronchial   | * Lymph Node, Mesenteric    |
| * Mammary Gland          | * Nose                     | * Ovary                   | * Pancreas                  |
| * Parathyroid Gland      | * Pituitary Gland          | * Salivary Glands         | * Skin                      |
| * Stomach, Forestomach   | * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             |
| * Trachea                | * Urinary Bladder          | * Uterus                  |                             |

**OBSERVATIONS**

- |                           |      |                                   |                       |
|---------------------------|------|-----------------------------------|-----------------------|
| * Adrenal Cortex          |      | Accessory Adrenal Cortical Nodule |                       |
| * Clitoral Gland          | Duct | Ectasia                           | Moderate              |
| * Harderian Gland         |      | Concretion                        |                       |
| * Lung                    |      | Infiltration Cellular             | Histiocyte, Minimal   |
|                           |      | Inflammation                      | Eosinophil, Mild      |
| * Lymph Node, Mandibular  |      | Hyperplasia                       | Plasma Cell, Moderate |
| * Lymph Node, Mediastinal |      | Pigmentation                      | Minimal               |
| * Spleen                  |      | Pigmentation                      | Mild                  |

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 105

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62373

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Larynx	* Liver
* Lung	* Lymph Node, Mandibular	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Bronchial

**OBSERVATIONS**

* Harderian Gland	Inflammation	Chronic, Mild
* Lymph Node, Mediastinal	Pigmentation	Moderate
* Lymph Node, Mesenteric	Hyperplasia	Histiocytic, Minimal
	Pigmentation	Minimal
* Spleen	Pigmentation	Mild

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 106

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62374

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* 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	* Kidney
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Eye	Retina	Pigmentation	Mild
* Harderian Gland		Hyperplasia	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Kidney	Renal Tubule	Hyperplasia	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
* Ovary		Cyst	Minimal

[ Cyst TGLs = 1-9 ]

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 108

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62376

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Eye
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

\* Lymph Node, Bronchial

**OBSERVATIONS**

* Clitoral Gland	Inflammation	Chronic Active, Minimal
* Harderian Gland	Concretion	
* Lung	Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mediastinal	Pigmentation	Mild
* Spleen	Pigmentation	Mild

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 109

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 62377

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Larynx
* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Lung	Infiltration Cellular	Histiocyte, Minimal
* Thymus	Cyst	Minimal



Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 110

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex	Accessory Adrenal Cortical Nodule	Multifocal
* Clitoral Gland	Inflammation	Chronic Active, Minimal
* Lung	Infiltration Cellular	Histiocyte, Minimal
	Inflammation	Eosinophil, Minimal
* Lymph Node, Mandibular	Hyperplasia	Plasma Cell, Minimal
* Lymph Node, Mediastinal	Pigmentation	Mild
* Spleen	Pigmentation	Moderate
* Thymus	Cyst	

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 301

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62469

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 302

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62470

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

Trachea

Epithelium

Regeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 303

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62471

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

Trachea

Epithelium

Regeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 304

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62472

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Trachea

---

**OBSERVATIONS**

Nose

Olfactory Epi

Degeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 305

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62473

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Nose

Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 306

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62474

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye  
Trachea

\* Larynx

Nose

Pancreas

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 307

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62475

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 308

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62476

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 309

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62477

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

---

**OBSERVATIONS**

Trachea

Epithelium

Regeneration

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 310

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 6.25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62478

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

Nose

Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 501

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62449

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Lung

\* Nose

Trachea

---

**OBSERVATIONS**

Eye

Bilateral, Retina

Dysplasia

Inflammation

Chronic Active, Minimal

---

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 502

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 12.5 ppm

DISP: Terminal Sacrifice

HISTO: 62450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Eye  
Trachea

Kidney

\* Larynx

\* Nose

OBSERVATIONS

Lung

Perivascular

Infiltration Cellular  
Inflammation

Mononuclear CI, Minimal  
Eosinophil, Minimal

Ovary

Cyst

Mild

[ Cyst TGLs = 1-9 ]

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 503

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62451

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

\* Nose

Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 504

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62452

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Lung

\* Nose

Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 505

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62453

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

---



Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 506

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 12.5 ppm

DISP: Terminal Sacrifice

HISTO: 62454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Eye

\* Larynx

INSUFFICIENT TISSUE

Trachea

OBSERVATIONS

Lung

Alveolar Epith

Hyperplasia

Mild

Infiltration Cellular

Histiocyte, Minimal

[ Hyperplasia TGLs = 1-14 ]

\* Nose

Olfactory Epi

Atrophy

Minimal

Olfactory Epi

Metaplasia

Respiratory, Minimal

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 507

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62455

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

Lung

\* Nose

Trachea

---

**OBSERVATIONS**

Eye

Cornea

Inflammation

Acute, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 508

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62456

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye  
Trachea

\* Larynx

Lung

\* Nose

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 509

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62457

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Nose

Trachea

---

**OBSERVATIONS**

Eye

Conjunctiva

Inflammation

Acute, Minimal

Lung

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Eosinophil, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 510

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 12.5 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62458

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Eye

\* Larynx

\* Nose

Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 701

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62429

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

Lung

\* Trachea

---

**OBSERVATIONS**

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 702

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62430

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Lung

\* Nose

\* Trachea

---

**INSUFFICIENT TISSUE**

\* Eye

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 703

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62431

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Eosinophil, Minimal

\* Nose

Olfactory Epi

Atrophy

Minimal

Olfactory Epi

Metaplasia

Respiratory, Minimal

---



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 704

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62432

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

Lung

\* Nose

\* Trachea

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 705

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62433

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Trachea

---

**OBSERVATIONS**

Lung

Inflammation

Eosinophil, Minimal

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 706

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62434

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

Lung

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

\* Nose

Hyperplasia

Lymphoid, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 707

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62435

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Respirat Epith

Metaplasia

Squamous, Minimal

Lung

Infiltration Cellular

Histiocyte, Minimal

Inflammation

Eosinophil, Minimal

\* Nose

Respirat Epith

Hyperplasia

Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 708

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62436

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

Lung

\* Nose

\* Trachea

---

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 709

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 25 ppm

DISP: Terminal Sacrifice

HISTO: 62437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

\* Nose

OBSERVATIONS

\* Larynx

Inflammation

Chronic Active, Minimal

Respirat Epith

Metaplasia

Squamous, Minimal

Respirat Epith

Ulcer

Minimal

Lung

Infiltration Cellular

Histiocyte, Minimal

\* Trachea

Epithelium

Hyperplasia

Mild

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

**ANIMAL ID:** 710

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 25 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62438

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Eye

\* Larynx

\* Nose

\* Trachea

---

**OBSERVATIONS**

Lung

Infiltration Cellular

Histiocyte, Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 901

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 50 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62409

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Eye

**OBSERVATIONS**

* Larynx	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Mild



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

<b>ANIMAL ID:</b> 902	<b>TRT#:</b> 10 <b>DOSE:</b> 50 ppm	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 93 <b>HISTO:</b> 62410
<b>OBSERVATIONS</b>			
* Eye	Antr Chamber Ciliary Body Cornea	Inflammation Inflammation Inflammation	Acute, Minimal Acute, Minimal Acute, Minimal
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi Respirat Epith	Atrophy Hyperplasia Inflammation	Minimal Mild Suppurative, Mild
	Respirat Epith Olfactory Epi	Metaplasia Metaplasia	Squamous, Minimal Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Mild

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

---

<b>ANIMAL ID:</b> 903	<b>TRT#:</b> 10 <b>DOSE:</b> 50 ppm	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 93 <b>HISTO:</b> 62411
<b>OBSERVATIONS</b>			
* Eye	Fat, Retrobulbar Conjunctiva	Inflammation Inflammation	Acute, Minimal Acute, Minimal
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Infiltration Cellular Inflammation	Histiocyte, Minimal Eosinophil, Minimal
* Nose	Olfactory Epi Respirat Epith	Atrophy Hyperplasia Inflammation	Minimal Mild Suppurative, Mild
	Respirat Epith Olfactory Epi	Metaplasia Metaplasia	Squamous, Mild Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal

---

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 904

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 50 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62412

**ORGAN AND ACCOUNTABLE SITE STATUS**

**INSUFFICIENT TISSUE**

\* Eye

**OBSERVATIONS**

* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
* Trachea	Epithelium	Regeneration	Moderate

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 905

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Eye

OBSERVATIONS

* Larynx	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Nose	Turbinate	Atrophy	Minimal
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Regeneration	Minimal
* Trachea	Epithelium	Regeneration	Minimal

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

**ANIMAL ID:** 906

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 50 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62414

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Trachea

**OBSERVATIONS**

* Eye	Cornea	Inflammation	Acute, Mild
	Antr Chamber	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Mild
	Sclera	Inflammation	Acute, Mild
	Cornea, Epithelium	Vacuolation	Mild
* Larynx	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Metaplasia	Osseous, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLs = 1-14 ]			
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Regeneration	Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 907

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Trachea

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Minimal
	Antr Chamber	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Minimal
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 908

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Trachea

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Minimal
	Sclera	Inflammation	Acute, Minimal
	[ Inflammation TGLs = 1-13 ]		
* Larynx	Respirat Epith	Metaplasia	Squamous, Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 909

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 50 ppm

DISP: Terminal Sacrifice

HISTO: 62417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lung

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Minimal
	Ciliary Body	Inflammation	Acute, Minimal
	Retina	Pigmentation	Minimal
	[ Inflammation TGLs = 1-13, 13R ]		
* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
* Nose	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Trachea	Epithelium	Regeneration	Minimal



**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

ANIMAL ID: 910	TRT#: 10 DOSE: 50 ppm	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 62418
<b>OBSERVATIONS</b>			
* Eye	Retina	Dysplasia	Minimal
* Larynx	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
* Lung		Metaplasia	Osseous, Minimal
* Nose	Turbinate	Atrophy	Minimal
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Minimal
	Respirat Epith	Regeneration	Minimal
* Trachea	Epithelium	Regeneration	Minimal

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1101

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* 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	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	* Uterus

OBSERVATIONS

* Eye	Ciliary Body	Inflammation	Acute, Minimal
* Harderian Gland		Hyperplasia	Minimal
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
	Squam Epithel	Necrosis	Minimal
* Lung		Fibrosis	Focal, Minimal
	Bronchiole, Epithelium	Hyperplasia	Minimal
	Bronchus, Epithelium	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Mild
	Bronchus, Epithelium, Goblet Cell	Metaplasia	Moderate
	Bronchus, Epithelium	Regeneration	Mild
	[ Inflammation TGLs = 1-4+5+14 ]		
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1101

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62389

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Trachea

Respirat Epith  
Epithelium

Regeneration  
Regeneration

Mild  
Moderate

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1102

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62390

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Eye
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Harderian Gland		Concretion	
* Larynx	Respirat Epith	Inflammation	Chronic Active, Minimal
* Lung		Metaplasia	Squamous, Moderate
	Bronchus, Epithelium	Inflammation	Eosinophil, Minimal
* Lymph Node, Bronchial		Regeneration	Moderate
* Nose	Turbinate	Pigmentation	Mild
	Olfactory Epi	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Degeneration	Minimal
		Hyperplasia	Moderate
	Respirat Epith	Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Respirat Epith	Necrosis	Mild
* Spleen		Regeneration	Minimal
* Thyroid Gland		Pigmentation	Minimal
* Trachea	Epithelium	Ultimobranchial Cyst	
	Epithelium	Necrosis	Minimal
		Regeneration	Moderate

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1103

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla           | * Blood Vessel           | * Bone                     | * Bone Marrow             |
| * Brain                     | * Clitoral Gland         | * Esophagus                | * Eye                     |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Kidney                    | * Liver                  | * Lymph Node, Bronchial    | * Lymph Node, Mandibular  |
| * Lymph Node, Mesenteric    | * Mammary Gland          | * Ovary                    | * Pancreas                |
| * Parathyroid Gland         | * Pituitary Gland        | * Salivary Glands          | * Skin                    |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   | * Urinary Bladder         |
| * Uterus                    |                          |                            |                           |

OBSERVATIONS

- |                           |                                   |                                   |                         |
|---------------------------|-----------------------------------|-----------------------------------|-------------------------|
| * Adrenal Cortex          |                                   | Accessory Adrenal Cortical Nodule |                         |
| * Harderian Gland         |                                   | Concretion                        |                         |
| * Larynx                  | Squam Epithel                     | Hyperplasia                       | Minimal                 |
|                           |                                   | Inflammation                      | Chronic Active, Minimal |
|                           | Respirat Epith                    | Metaplasia                        | Squamous, Moderate      |
|                           | Squam Epithel                     | Necrosis                          | Minimal                 |
| * Lung                    | Bronchiole, Epithelium            | Hyperplasia                       | Mild                    |
|                           |                                   | Infiltration Cellular             | Histiocyte, Mild        |
|                           |                                   | Inflammation                      | Eosinophil, Mild        |
|                           | Bronchus, Epithelium, Goblet Cell | Metaplasia                        | Moderate                |
|                           | Bronchus, Epithelium              | Regeneration                      | Mild                    |
| * Lymph Node, Mediastinal |                                   | Pigmentation                      | Moderate                |
| * Nose                    | Turbinate                         | Atrophy                           | Mild                    |
|                           | Olfactory Epi                     | Atrophy                           | Minimal                 |
|                           | Respirat Epith                    | Hyperplasia                       | Moderate                |
|                           |                                   | Inflammation                      | Suppurative, Moderate   |
|                           | Respirat Epith                    | Metaplasia                        | Squamous, Mild          |
|                           | Olfactory Epi                     | Metaplasia                        | Respiratory, Minimal    |
|                           | Respirat Epith                    | Necrosis                          | Mild                    |
|                           | Respirat Epith                    | Regeneration                      | Minimal                 |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1103

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62391

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Pigmentation	Minimal
* Thyroid Gland		Ultimobranchial Cyst	
* Trachea	Epithelium	Hyperplasia	Moderate
		Inflammation	Acute, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
	Epithelium	Regeneration	Moderate

---

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1104

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Bronchial	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Eye	Cornea	Inflammation	Acute, Minimal
	[ Inflammation TGLs = 1-13 ]		
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
	Squam Epithel	Ulcer	Mild
* Lung		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Minimal
	Bronchus, Epithelium	Regeneration	Minimal
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Mild
* Lymph Node, Mediastinal		Pigmentation	Minimal
* Lymph Node, Mesenteric		Hyperplasia	Histiocytic, Minimal
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1104

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62392

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen	Respirat Epith	Regeneration	Mild
* Stomach, Forestomach	Epithelium	Pigmentation	Moderate
* Trachea	Epithelium	Hyperplasia	Minimal
	Epithelium	Metaplasia	Squamous, Minimal
	Epithelium	Regeneration	Moderate

---



Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1105

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62393

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	* Uterus

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Eye	Cornea	Inflammation	Acute, Minimal
[ Inflammation TGLs = 1-13 ]			
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Inflammation	Chronic Active, Minimal
	Squam Epithel	Metaplasia	Squamous, Moderate
* Lung		Ulcer	Moderate
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Mild
* Nose	Bronchus, Epithelium	Regeneration	Mild
	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1105

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62393

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Trachea	Respirat Epith	Regeneration	Minimal
	Epithelium	Hyperplasia	Moderate
	Epithelium	Regeneration	Moderate

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1106

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | * Blood Vessel            | * 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      | * Kidney                    |
| * Mammary Gland          | * Ovary                    | * Pancreas                | * Parathyroid Gland         |
| * Salivary Glands        | * Skin                     | * Stomach, Forestomach    | * Stomach, Glandular        |
| * Thymus                 | * Urinary Bladder          | * Uterus                  |                             |

OBSERVATIONS

- |                           |                              |                       |                         |
|---------------------------|------------------------------|-----------------------|-------------------------|
| * Clitoral Gland          |                              | Inflammation          | Chronic Active, Minimal |
| * Eye                     | Cornea                       | Inflammation          | Acute, Minimal          |
|                           | Ciliary Body                 | Inflammation          | Acute, Minimal          |
|                           | [ Inflammation TGLs = 1-13 ] |                       |                         |
| * Harderian Gland         |                              | Concretion            |                         |
| * Larynx                  | Squam Epithel                | Hyperplasia           | Minimal                 |
|                           | Respirat Epith               | Metaplasia            | Squamous, Moderate      |
|                           | Squam Epithel                | Necrosis              | Minimal                 |
| * Liver                   |                              | Infiltration Cellular | Mixed Cell, Minimal     |
| * Lung                    |                              | Fibrosis              | Focal                   |
|                           | Bronchus, Epithelium         | Hyperplasia           | Minimal                 |
|                           | Bronchiole, Epithelium       | Hyperplasia           | Minimal                 |
|                           |                              | Infiltration Cellular | Histiocyte, Mild        |
|                           |                              | Inflammation          | Eosinophil, Minimal     |
| * Lymph Node, Bronchial   |                              | Hyperplasia           | Plasma Cell, Mild       |
|                           |                              | Pigmentation          | Mild                    |
| * Lymph Node, Mandibular  |                              | Hyperplasia           | Plasma Cell, Minimal    |
| * Lymph Node, Mediastinal |                              | Hyperplasia           | Plasma Cell, Mild       |
|                           |                              | Pigmentation          | Mild                    |
| * Lymph Node, Mesenteric  |                              | Hyperplasia           | Histiocytic, Minimal    |
| * Nose                    | Turbinate                    | Atrophy               | Mild                    |
|                           | Olfactory Epi                | Atrophy               | Minimal                 |

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 08010 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
Time Report Requested: 09:07:39  
First Dose M/F: 09/13/10 / 09/14/10  
Lab: BNW

ANIMAL ID: 1106

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62394

**ORGAN AND ACCOUNTABLE SITE STATUS**

	Olfactory Epi	Degeneration	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
* Pituitary Gland		Cyst	Minimal
* Spleen		Pigmentation	Moderate
* Thyroid Gland		Ultimobranchial Cyst	
* Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Necrosis	Minimal
	Epithelium	Regeneration	Moderate

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1107

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Larynx	Squam Epithel	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
	Squam Epithel	Necrosis	Mild
	Respirat Epith	Regeneration	Minimal
	Squam Epithel	Ulcer	Mild
* Liver		Infiltration Cellular	Mixed Cell, Minimal
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
	Bronchus, Epithelium	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Eosinophil, Mild
		Mineralization	Focal, Minimal
	Bronchus, Epithelium	Regeneration	Minimal
* Lymph Node, Mediastinal		Hyperplasia	Plasma Cell, Minimal
		Pigmentation	Moderate
* Lymph Node, Mesenteric		Hyperplasia	Histiocytic, Minimal
* Nose	Turbinate	Atrophy	Mild
	Respirat Epith	Hyperplasia	Moderate
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1107

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62395

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Moderate
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spleen		Pigmentation	Moderate
* Thymus		Cyst	
* Trachea	Epithelium	Regeneration	Moderate

---

Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1108

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	* Uterus

OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Eye	Cornea	Inflammation	Acute, Minimal
	[ Inflammation TGLs = 1-13 ]		
* Larynx	Squam Epithel	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
	Squam Epithel	Ulcer	Mild
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
	Bronchus, Epithelium	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Mild
	Alveolus	Infiltration Cellular	Polymorphnuclr, Minimal
		Inflammation	Eosinophil, Moderate
* Nose	Bronchus, Epithelium	Regeneration	Minimal
	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1108

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62396

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Trachea	Respirat Epith	Regeneration	Mild
	Respirat Epith	Ulcer	Minimal
		Inflammation	Acute, Minimal
	Epithelium	Regeneration	Moderate

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1109

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* 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	* Kidney
* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Eye	Cornea, Epithelium	Hyperplasia	Minimal
	Cornea	Inflammation	Acute, Moderate
	Cornea	Ulcer	Mild
	[ Inflammation TGLs = 1-13 ]		
* Harderian Gland		Inflammation	Chronic Active, Minimal
* Heart		Cardiomyopathy	Minimal
* Larynx	Squam Epithel	Hyperplasia	Minimal
		Inflammation	Chronic Active, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
	Squam Epithel	Necrosis	Minimal
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Infiltration Cellular	Polymorphnuclr, Minimal
		Inflammation	Eosinophil, Mild
	Bronchus, Epithelium, Goblet Cell	Metaplasia	Minimal
	Bronchus, Epithelium	Regeneration	Mild
	[ Inflammation TGLs = 2-14 ]		
* Nose	Turbinate	Atrophy	Mild
	Olfactory Epi	Atrophy	Minimal
	Olfactory Epi	Degeneration	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1109

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62397

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Respirat Epith	Necrosis	Moderate
	Respirat Epith	Regeneration	Moderate
* Trachea		Inflammation	Suppurative, Minimal
	Epithelium	Regeneration	Moderate

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Experiment Number: 08010 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
 2,3-Pentanedione  
 CAS Number: 600-14-6

Date Report Requested: 04/29/2016  
 Time Report Requested: 09:07:39  
 First Dose M/F: 09/13/10 / 09/14/10  
 Lab: BNW

ANIMAL ID: 1110

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Urinary Bladder	* Uterus

MISSING

\* Adrenal Medulla

INSUFFICIENT TISSUE

\* Lymph Node, Mediastinal

OBSERVATIONS

* Eye	Cornea	Inflammation	Acute, Minimal
	Cornea	Necrosis	Minimal
	Cornea	Neovascularization	Minimal
	[ Inflammation TGLs = 1-13 ]		
* Larynx	Squam Epithel	Hyperplasia	Minimal
	Respirat Epith	Metaplasia	Squamous, Moderate
	Respirat Epith	Necrosis	Minimal
* Lung	Bronchiole, Epithelium	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Eosinophil, Minimal
* Nose	Olfactory Epi	Atrophy	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Hyperplasia	Lymphoid, Minimal
		Inflammation	Suppurative, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Olfactory Epi	Metaplasia	Respiratory, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 08010 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
2,3-Pentanedione  
**CAS Number:** 600-14-6

**Date Report Requested:** 04/29/2016  
**Time Report Requested:** 09:07:39  
**First Dose M/F:** 09/13/10 / 09/14/10  
**Lab:** BNW

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**ANIMAL ID:** 1110

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 93

**DOSE:** 100 ppm

**DISP:** Terminal Sacrifice

**HISTO:** 62398

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Necrosis	Mild
	Respirat Epith	Regeneration	Mild
* Spleen		Pigmentation	Mild
* Thymus	Epithel Cell	Hyperplasia	Minimal
* Thyroid Gland		Ultimobranchial Cyst	
* Trachea	Epithelium	Hyperplasia	Moderate
	Epithelium	Regeneration	Moderate

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\*\*\* END OF REPORT \*\*\*