

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**C Number:** C53587

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Female

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_001

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Focal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Focal Cellular Change
		Hypertrophy, Nos
Lung		Cholesterol Deposit
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_002

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Dosing Accident

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Congestion, Nos
		Foreign Body, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_003

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Congestion, Nos
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Lung		Lymphocytic Inflammatory Infiltrate
Mammary gland	Mammary Duct	Cyst, Multiple
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Spleen		Fibrosis, Multifocal
		Hemorrhage
Stomach	Glandular Stomach	Edema, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute/Chronic
	Forestomach	Ulcer, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_004

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Angiectasis Pheochromocytoma
Clitoral gland		Carcinoma, Nos
Eye		Cataract
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hypertrophy, Nos
Mammary gland	Mammary Duct	Adenosis Cyst, Multiple Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary Anterior Pituitary Anterior Pituitary Anterior Pituitary	Adenoma, Nos Angiectasis Cyst, Nos Hemorrhage

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_005

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Clitoral gland

Cortex Nos

Cyst, Nos  
Hyperplasia, Nos  
Inflammation, Acute Suppurative

Heart  
Kidney  
Liver

Bile Duct

Thrombus, Mural  
Nephropathy  
Hyperplasia, Nos  
Hypertrophy, Nos  
Necrosis, Zonal  
Cystic Ducts  
Hematopoiesis

Mammary gland  
Spleen

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_006

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Harderian gland  
Heart  
Kidney  
Liver  
Nasal cavity  
Thyroid  
  
Uterus

Medulla  
Hardarian Gland

Pheochromocytoma  
Lymphocytic Inflammatory Infiltrate  
Fibrosis, Focal  
Nephropathy  
Hypertrophy, Nos  
Lymphocytic Inflammatory Infiltrate  
Cystic Follicles  
Hyperplasia, Follicular Cell  
Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_007

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Lymphocytic Inflammatory Infiltrate
Kidney	Nephropathy
Uterus	Prolapse

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: C53587

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Chlorinated paraffins: C12, 60% chlorine  
CAS Number: 108171-26-2

Date Report Requested: 10/26/2014

Time Report Requested: 16:19:21

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_008

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 625.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Angiectasis
	Cortex Nos	Necrosis, Focal
Clitoral gland		Atrophy, Nos
Harderian gland	Harderian Gland	Lymphocytic Inflammatory Infiltrate
Heart		Fibrosis, Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Nos
Mammary gland		Adenosis
	Mammary Duct	Cyst, Multiple
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Nos
		Periarteritis
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Hemorrhage
Skin	Ear	Hyperkeratosis
	Ear	Hyperplasia, Epithelial
Spleen		Fibrosis, Focal
Stomach	Glandular Stomach	Edema, Nos
	Glandular Stomach	Inflammation, Acute/Chronic
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_009

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Large	Cecum, Colon	Distention
	Cecum, Colon	Edema, Nos
	Cecum, Colon	Inflammation, Chronic
Intestine Small	Mesentery Nos	Congestion, Nos
	Duodenum	Erosion
	Mesentery Nos	Hemorrhage
	Mesentery Nos	Torsion
Kidney		Nephropathy
Liver		Hypertrophy, Nos
		Necrosis, Focal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hemosiderosis
Thyroid		Cyst, Embryonal Duct
		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_010

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Liver  
Lung  
Thymus

Hypertrophy, Nos  
Congestion, Nos  
Hemorrhage

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_011

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_012

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Harderian gland

Hardarian Gland

Lymphocytic Inflammatory Infiltrate

Intestine Small

Mesentery Nos

Necrosis, Fat

Kidney

Nephropathy

Liver

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Mammary gland

Hypertrophy, Nos

Uterus

Fibroadenoma

Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_013

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart

Kidney

Liver

Lung

Mammary gland

Pituitary gland

Cortex

Anterior Pituitary

Anterior Pituitary

Fibrosis, Multifocal

Cyst, Multiple

Nephropathy

Hypertrophy, Nos

Histiocytosis

Adenosis

Cystic Ducts

Adenoma, Nos

Angiectasis

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_014

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Focal Cellular Change
		Hypertrophy, Nos
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemorrhage
	Anterior Pituitary	Hemosiderosis
Skin	Back	Keratoacanthoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_015

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Inflammation, Acute Suppurative Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Ovary		Cyst, Parovarian
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Nos
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_016

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart

Kidney

Liver

Bile Duct

Mammary gland

Pancreas

Fibrosis, Multifocal

Nephropathy

Hyperplasia, Nos

Hypertrophy, Nos

Cystic Ducts

Atrophy, Focal

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_017

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney

Nephropathy

Liver

Angiectasis

Unspecified

Multiple Organs Nos

Hypertrophy, Nos

Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_018

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Angiectasis

Cortical Adenoma

Heart

Medulla

Pheochromocytoma

Fibrosis, Multifocal

Liver

Focal Cellular Change

Hypertrophy, Nos

Mammary gland

Cystic Ducts

Pancreas

Atrophy, Focal

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Thyroid

Anterior Pituitary

Angiectasis

Uterus

Cyst, Embryonal Duct

Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_019

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Clitoral gland  
Eye  
Kidney  
Liver

Cortex Nos

Angiectasis  
Carcinoma, Nos  
Retinopathy  
Nephropathy  
Hypertrophy, Nos  
Necrosis, Focal  
Necrosis, Zonal  
Neoplastic Nodule

Mammary gland  
Unspecified  
Uterus

Multiple Organs Nos

Cystic Ducts  
Leukemia, Mononuclear Cell  
Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C53587

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Chlorinated paraffins: C12, 60% chlorine  
CAS Number: 108171-26-2

Date Report Requested: 10/26/2014

Time Report Requested: 16:19:21

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_020

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 625.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Brain		Compression, Nos
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Malposition, Nos
		Necrosis, Zonal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Stomach	Glandular Stomach	Edema, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute/Chronic
	Forestomach	Ulcer, Nos
Thyroid		C-Cell Adenoma
		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_021

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Hemosiderosis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_022

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Small

Mesentery Nos

Necrosis, Fat

Kidney

Nephropathy

Liver

Hypertrophy, Nos

Mammary gland

Adenoma, Nos

Cystic Ducts

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_023

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Focal
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Spleen		Atrophy, Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_024

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Liver

Colon

Parasitism  
Nephropathy  
Hypertrophy, Nos  
Neoplastic Nodule

Mammary gland  
Pituitary gland

Anterior Pituitary  
Anterior Pituitary

Cystic Ducts  
Adenoma, Nos  
Angiectasis  
Follicular-Cell Carcinoma  
Endometrial Stromal Polyp  
Inflammation, Acute Suppurative

Thyroid  
Uterus

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_025

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis
Kidney		Nephropathy
Liver		Angiectasis
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Inflammation, Granulomatous Focal
Pancreas		Ectopia
Thyroid		C-Cell Carcinoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_026

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Angiectasis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Adenocarcinoma, Nos
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin	Tail	Hyperkeratosis
	Tail	Hyperplasia, Epithelial
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_027

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Bone		Fibrous Osteodystrophy
	Skull	Hyperostosis
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_028

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Pancreas		Acinar-Cell Carcinoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Skin	Ear	Hyperplasia, Nos
Thyroid		Follicular-Cell Carcinoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_029

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Congestion, Nos

Brain

Hemorrhage

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos

Hypertrophy, Nos

Lung

Necrosis, Nos

Mammary gland

Hemorrhage

Unspecified

Multiple Organs Nos

Adenosis

Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_030

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart	Fibrosis, Multifocal
Kidney	Nephropathy
Liver	Angiectasis
	Hypertrophy, Nos
Lung	Inflammation, Chronic Focal
Uterus	Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_031

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Angiectasis
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Zonal
Mammary gland		Adenosis
		Fibroadenoma
Skin	Ear	Cyst, Epidermal Inclusion
	Ear	Squamous Cell Papilloma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_032

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland  
Harderian gland  
Heart  
Kidney  
Liver

Hardarian Gland

Mammary gland

Pituitary gland

Anterior Pituitary  
Anterior Pituitary

Cystic Ducts  
Lymphocytic Inflammatory Infiltrate  
Fibrosis, Multifocal  
Nephropathy  
Hypertrophy, Nos  
Neoplastic Nodule  
Cystic Ducts  
Fibroadenoma  
Adenoma, Nos  
Angiectasis

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_033

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos Hypertrophy, Nos
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_034

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy

Mammary gland

Cystic Ducts

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

Anterior Pituitary

Hemorrhage

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_035

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Medulla	Pheochromocytoma, Malignant
Harderian gland	Hardarian Gland	Lymphocytic Inflammatory Infiltrate
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Clear-Cell Change
		Hypertrophy, Nos
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_036

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Nephropathy
Liver		Angiectasis
		Hepatocellular Carcinoma
		Hypertrophy, Nos
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Hyperplasia, Focal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_037

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Ear	Inflammation, Acute Suppurative
Kidney	Nephropathy
Pancreas	Ectopia
Thyroid	Cyst, Embryonal Duct
	Hyperplasia, Cystic
Tongue	Squamous Cell Papilloma
Zymbal gland	Carcinoma, Nos

---

**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_038

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos

Hypertrophy, Nos

Mammary gland

Cystic Ducts

Thyroid

C-Cell Carcinoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_039

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Hemorrhage
Eye		Cataract
		Retinopathy
Intestine Small	Duodenum	Erosion
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Skin	Ear	Neurofibrosarcoma
Spleen		Necrosis, Nos
Stomach	Glandular Stomach	Erosion
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_040

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Granuloma, Nos
		Hypertrophy, Nos
Lung		Histiocytosis
Mammary gland		Cystic Ducts
Ovary		Cyst, Nos
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_041

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Hemangioma
		Nephropathy
Liver		Angiectasis
		Hypertrophy, Nos
Lung		Alveolar/Bronchiolar Adenoma
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_042

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Brain		Hemorrhage
Heart		Fibrosis
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
		Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Nos
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Focal
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_043

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos Hypertrophy, Nos
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Thyroid		Hyperplasia, Follicular Cell
Unspecified	Thorax	Fibroma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_044

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Focal Cellular Change
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Thyroid		Cystic Follicles
		Follicular-Cell Carcinoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 1\_045

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Clear-Cell Change
		Hypertrophy, Nos
Lung		Inflammation, Chronic Focal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Ovary		Cyst, Parovarian
Pancreas	Islets	Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_046

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Liver

Colon

Parasitism  
Nephropathy  
Angiectasis  
Degeneration, Cystic  
Hypertrophy, Nos  
Trichoepithelioma  
C-Cell Adenoma  
Cystic Follicles  
Hyperplasia, Follicular Cell

Skin  
Thyroid

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_047

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Brain		Compression, Nos
Kidney		Nephropathy
Liver		Hypertrophy, Nos
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Spleen		Hemosiderosis

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_048

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Necrosis, Focal
	Medulla	Necrosis, Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Skin	Abdomen	Hyperkeratosis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 1\_049

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Liver  
Nasal cavity  
Pancreas  
Skin  
Unspecified  
Uterus

Rectum  
  
  
  
  
Ear  
Multiple Organs Nos

Parasitism  
Nephropathy  
Hypertrophy, Nos  
Lymphocytic Inflammatory Infiltrate  
Atrophy, Focal  
Squamous Cell Papilloma  
Leukemia, Mononuclear Cell  
Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 1\_050

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 625.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Heart		Lymphocytic Inflammatory Infiltrate
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Lung		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Thyroid		Cystic Follicles
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_001

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Multifocal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Nos
Thyroid		Cystic Follicles
		Follicular-Cell Adenoma
Uterus	Cervix Uteri	Cyst, Nos
		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_002

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain	Cerebellum Nos	Angiectasis
Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Zonal
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hemosiderosis
Spleen		Fibrosis, Focal
Stomach	Glandular Stomach	Erosion
Thyroid		Cyst, Embryonal Duct
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_003

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Small

Mesentery Nos

Necrosis, Fat

Kidney

Nephropathy

Liver

Neoplastic Nodule

Mammary gland

Cystic Ducts

Thyroid

Fibroadenoma

Hyperplasia, Follicular Cell

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_004

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis, Focal
Kidney		Nephropathy
Liver		Hypertrophy, Nos
		Necrosis, Focal
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Thyroid		Hyperplasia, Follicular Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_005

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Malposition, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Ectopia
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_006

**TRT#:** 2  
**DOSE:** 312.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Brain		Carcinoma, Nos, Invasive
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Carcinoma, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_007

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Multifocal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Multiple
Thyroid		C-Cell Adenoma
		Cystic Follicles
		Follicular-Cell Adenoma
Unspecified		Fibroma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_008

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland

Kidney

Liver

Mammary gland

Nasal cavity

Pancreas

Uterus

Bile Duct

Atrophy, Nos

Nephropathy

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Cystic Ducts

Fibroadenoma

Lymphocytic Inflammatory Infiltrate

Atrophy, Focal

Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_009

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute/Chronic
	Forestomach	Ulcer, Nos
Thyroid		C-Cell Adenoma
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_010

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Acute Suppurative
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Multifocal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Angiectasis
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Neoplastic Nodule
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hyperplasia, Focal
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_011

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye		Cataract
		Retinopathy
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Ovary		Cyst, Parovarian
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_012

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos

Congestion, Nos

Clitoral gland

Medulla

Pheochromocytoma

Kidney

Carcinoma, Nos

Liver

Nephropathy

Malposition, Nos

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_013

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Acute/Chronic
Heart		Thrombus, Mural
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver	Bile Duct	Cytoplasmic Vacuolization
		Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hemosiderosis
Spleen		Necrosis, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_014

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart		Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Hepatocellular Carcinoma
	Bile Duct	Hyperplasia, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_015

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Focal Cellular Change
		Hypertrophy, Nos
Lung		Congestion, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
Uterus		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_016

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Angiectasis
Eye		Cataract
		Retinopathy
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Cyst, Nos
Stomach	Glandular Stomach	Edema, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_017

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney

Liver

Mammary gland

Spleen

Thyroid

Nephropathy

Necrosis, Nos

Adenosis

Cystic Ducts

Fibroadenoma

Hematopoiesis

Cystic Follicles

Follicular-Cell Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_018

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Focal
Eye		Cataract
		Retinopathy
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Hypertrophy, Nos
		Necrosis, Focal
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
Stomach		Periarteritis
Uterus		Hydrometra

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_019

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Stomach	Forestomach	Inflammation, Acute Suppurative
Thyroid		Cyst, Embryonal Duct
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_020

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Necrosis, Focal

Kidney

Nephropathy

Liver

Hemorrhage

Lung

Necrosis, Zonal

Congestion, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_021

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Hemorrhage
		Inflammation, Acute/Chronic
Eye		Cataract
		Retinopathy
Heart		Fibrosis, Focal
Intestine Large	Rectum	Edema, Nos
	Rectum	Inflammation, Acute/Chronic
Kidney		Nephropathy
Liver		Angiectasis
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_022

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland

Eye

Kidney

Liver

Bile Duct

Lung

Mammary gland

Pancreas

Unspecified

Multiple Organs Nos

Atrophy, Nos

Cataract

Retinopathy

Nephropathy

Hyperplasia, Nos

Hypertrophy, Nos

Necrosis, Zonal

Hemorrhage

Cystic Ducts

Ectopia

Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_023

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Compression, Nos
Clitoral gland		Atrophy, Nos
Ear	Middle Ear	Compression, Nos
Eye		Cataract
	Nasolacrimal Duct	Inflammation, Acute Suppurative
		Retinopathy
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Lymph node	Mesenteric Lymph Node	Angiectasis
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_024

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos Hypertrophy, Nos Necrosis, Nos
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Focal
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute/Chronic
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_025

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Brain		Hemorrhage
Eye		Cataract
		Retinopathy
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Focal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_026

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Necrosis, Hemorrhagic

Kidney

Nephropathy

Liver

Necrosis, Zonal

Unspecified

Multiple Organs Nos

Fibrosarcoma

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_027

**TRT#:** 2  
**DOSE:** 312.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Focal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Focal Cellular Change
		Hypertrophy, Nos
Lymph node	Mesenteric Lymph Node	Angiectasis
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Skin		Keratoacanthoma
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_028

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Intestine Small  
Kidney  
Liver

Mesentery Nos

Necrosis, Fat

Mammary gland  
Nasal cavity  
Pancreas  
Pituitary gland

Bile Duct

Nephropathy

Hyperplasia, Nos

Hypertrophy, Nos

Necrosis, Nos

Cystic Ducts

Lymphocytic Inflammatory Infiltrate

Hyperplasia, Focal

Stomach

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

Anterior Pituitary

Hemosiderosis

Forestomach

Hyperkeratosis

Forestomach

Hyperplasia, Epithelial

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Uterus

Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_029

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Lung		Squamous Cell Carcinoma
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Angiectasis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_030

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland

Kidney

Liver

Mammary gland

Nasal cavity

Pancreas

Uterus

Cervix Uteri

Atrophy, Nos

Nephropathy

Cytoplasmic Change, Basophilic

Hypertrophy, Nos

Malposition, Nos

Cystic Ducts

Fibroadenoma

Lymphocytic Inflammatory Infiltrate

Acinar-Cell Adenoma

Endometrial Stromal Polyp

Polyp, Nos

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_031

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland

Atrophy, Nos

Heart

Fibrosis, Multifocal

Kidney

Nephropathy

Liver

Focal Cellular Change

Mammary gland

Hypertrophy, Nos

Nasal cavity

Cystic Ducts

Pituitary gland

Lymphocytic Inflammatory Infiltrate

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

Anterior Pituitary

Hemosiderosis

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_032

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver		Hypertrophy, Nos
Lymph node	Mesenteric Lymph Node	Angiectasis
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Cyst, Nos
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute/Chronic
	Forestomach	Ulcer, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_033

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Clitoral gland

Cortex Nos

Hyperplasia, Focal  
Adenoma, Nos  
Cystic Ducts

Eye

Cataract  
Retinopathy

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos  
Hypertrophy, Nos  
Necrosis, Nos

Mammary gland

Cystic Ducts

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_034

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver		Hypertrophy, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Ectopia
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_035

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney

Nephropathy

Liver

Hypertrophy, Nos

Leukemoid Reaction

Necrosis, Nos

Mammary gland

Cystic Ducts

Pituitary gland

Anterior Pituitary

Cyst, Nos

Thyroid

Follicular-Cell Adenoma

Unspecified

Multiple Organs Nos

Inflammation, Acute Suppurative

Uterus

Endometrial Stromal Polyp

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_036

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Necrosis, Focal

Kidney

Nephropathy

Liver

Hypertrophy, Nos

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_037

**TRT#:** 2  
**DOSE:** 312.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
	Cortex Nos	Hypertrophy, Focal
Heart		Fibrosis, Focal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Cyst, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Adenoma, Nos
		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_038

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Congenital Malformation, Nos
		Cytoplasmic Change, Basophilic
		Hypertrophy, Nos
Lung		Hemorrhage
		Inflammation, Granulomatous Focal
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_039

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Large  
Kidney  
Liver  
Mammary gland  
Nasal cavity  
Pancreas  
Pituitary gland

Rectum

Anterior Pituitary  
Anterior Pituitary  
Anterior Pituitary

Uterus

Parasitism  
Nephropathy  
Hypertrophy, Nos  
Cystic Ducts  
Lymphocytic Inflammatory Infiltrate  
Atrophy, Focal  
Adenoma, Nos  
Angiectasis  
Hemosiderosis  
Hemorrhage

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_040

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland

Adenoma, Nos

Heart

Necrosis, Nos

Kidney

Fibrosis, Multifocal

Liver

Nephropathy

Cytoplasmic Change, Basophilic

Hypertrophy, Nos

Mammary gland

Neoplastic Nodule

Nasal cavity

Cystic Ducts

Pituitary gland

Anterior Pituitary

Lymphocytic Inflammatory Infiltrate

Thyroid

Anterior Pituitary

Adenoma, Nos

Angiectasis

Angiectasis

C-Cell Adenoma

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_041

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Mammary gland		Cystic Ducts
Nasal cavity		Infection, Fungal
		Inflammation, Acute Suppurative
		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Thyroid		Cystic Follicles
		Hyperplasia, Follicular Cell
Uterus		Endometrial Stromal Polyp

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_042

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Nos
	Bile Duct	Cystic Ducts Lymphocytic Inflammatory Infiltrate
Mammary gland		Cyst, Nos
Nasal cavity		Adenoma, Nos
Ovary		Angiectasis
Pituitary gland	Anterior Pituitary	Hemosiderosis
	Anterior Pituitary	
	Anterior Pituitary	

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_043

**TRT#:** 2  
**DOSE:** 312.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Infection, Fungal
		Inflammation, Acute Suppurative
		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
		Hyperplasia, Focal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_044

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Zonal
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Stomach	Glandular Stomach	Erosion
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_045

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma
Heart		Fibrosis, Multifocal
Intestine Large	Colon	Parasitism
Kidney	Cortex	Cyst, Nos
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Thyroid		C-Cell Adenoma
		Cystic Follicles
		Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_046

**TRT#:** 2  
**DOSE:** 312.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Eye	Nasolacrimal Duct	Cataract Inflammation, Acute Suppurative Retinopathy
Heart		Fibrosis, Focal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Angiectasis Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos Hypertrophy, Nos
Lymph node	Mesenteric Lymph Node	Angiectasis
Mammary gland		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Uterus		Endometrial Stromal Sarcoma Necrosis, Focal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 2\_047

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney

Liver

Mammary gland

Pituitary gland

Unspecified

Bile Duct

Anterior Pituitary

Multiple Organs Nos

Nephropathy

Hyperplasia, Nos

Cystic Ducts

Cyst, Nos

Leukemia, Mononuclear Cell

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_048

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Angiectasis
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
		Hypertrophy, Nos
		Necrosis, Zonal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Skin	Neck	Keratoacanthoma
Stomach	Glandular Stomach	Erosion
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 2\_049

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos Hypertrophy, Nos Necrosis, Zonal
Mammary gland		Cystic Ducts Fibroadenoma
Pituitary gland	Anterior Pituitary Anterior Pituitary	Adenoma, Nos Cyst, Nos
Spleen		Necrosis, Focal
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 2\_050

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 312.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Eye

Cataract

Kidney

Retinopathy

Liver

Bile Duct

Nephropathy

Mammary gland

Hyperplasia, Nos

Nasal cavity

Cystic Ducts

Ovary

Lymphocytic Inflammatory Infiltrate

Pancreas

Cyst, Nos

Pituitary gland

Anterior Pituitary

Hyperplasia, Focal

Cyst, Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_001

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Nos
	Bile Duct	Histiocytosis
Lung		Hyperplasia, Focal
Pancreas		C-Cell Adenoma
Thyroid		

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 3\_002

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Liver		Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization
Mammary gland		Fibroadenoma
Ovary		Cyst, Parovarian
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_003

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Bone	Skull	Hyperostosis
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland		Cystic Ducts
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_004

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Nos
	Bile Duct	Lymphocytic Inflammatory Infiltrate
Nasal cavity		Cyst, Parovarian
Ovary		Hyperplasia, Focal
Pancreas		Hyperplasia, C Cell
Thyroid		

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_005

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Harderian gland

Hardarian Gland

Lymphocytic Inflammatory Infiltrate

Heart

Fibrosis, Multifocal

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Nos

Lung

Congestion, Nos

Mammary gland

Cystic Ducts

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

Anterior Pituitary

Cyst, Nos

Anterior Pituitary

Hemorrhage

Uterus

Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_006

**TRT#:** 3

**DOSE:** 0

**SEX:** Female

**DISP:** Terminal Sacrifice

**DAY ON TEST:**

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland

Kidney

Liver

Mammary gland

Thyroid

Uterus

Cortical Adenoma

Nephropathy

Cytoplasmic Change, Basophilic

Adenosis

Cystic Ducts

Hyperplasia, C Cell

Hydrometra

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_007

**TRT#:** 3

**DOSE:** 0

**SEX:** Female

**DISP:** Terminal Sacrifice

**DAY ON TEST:**

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Cystic Ducts
Nasal cavity		Infection, Fungal
		Inflammation, Acute Suppurative
		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 3\_008

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney  
Liver  
Mammary gland

Cortex Nos

Degeneration, Lipoid  
Fibrosis, Multifocal  
Nephropathy  
Cytoplasmic Change, Basophilic  
Adenocarcinoma, Nos  
Cystic Ducts  
Lymphocytic Inflammatory Infiltrate  
Adenoma, Nos  
Angiectasis  
Hemosiderosis

Nasal cavity  
Pituitary gland

Anterior Pituitary  
Anterior Pituitary  
Anterior Pituitary

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_009

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Cortex Nos Medulla	Accessory Structure Degeneration, Lipoid Hematopoiesis
Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lung		Carcinoma, Nos, Metastatic
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary Anterior Pituitary Anterior Pituitary	Angiectasis Carcinoma, Nos Hemosiderosis
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_010

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
		Necrosis, Focal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Cyst, Nos
Unspecified		Fibrous Histiocytoma, Malignant
	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_011

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Intestine Large	Rectum	Parasitism
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Nasal cavity		Infection, Fungal
		Inflammation, Acute Suppurative
		Lymphocytic Inflammatory Infiltrate
Pancreas		Acinar-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Nos
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_012

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney	Cortex	Cyst, Nos Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland	Bile Duct	Hyperplasia, Nos Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_013

**TRT#:** 3

**DOSE:** 0

**SEX:** Female

**DISP:** Terminal Sacrifice

**DAY ON TEST:**

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Granulomatous Focal
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hyperplasia, Focal
Stomach	Forestomach	Cyst, Nos
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_014

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Compression, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Mammary gland		Adenosis
		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_015

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Eye

Cataract

Liver

Retinopathy

Mammary gland

Bile Duct

Cytoplasmic Change, Basophilic

Nasal cavity

Hyperplasia, Nos

Pituitary gland

Cystic Ducts

Lymphocytic Inflammatory Infiltrate

Skin

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

Back

Basal-Cell Tumor

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_016

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Heart  
Liver

Medulla

Hyperplasia, Focal  
Fibrosis, Multifocal  
Cytoplasmic Change, Basophilic  
Hyperplasia, Nos  
Inflammation, Granulomatous Focal

Bile Duct

Cystic Ducts  
Lymphocytic Inflammatory Infiltrate

Mammary gland  
Nasal cavity  
Pituitary gland

Anterior Pituitary  
Anterior Pituitary  
Anterior Pituitary

Adenoma, Nos  
Angiectasis  
Cyst, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_017

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Intestine Large  
Intestine Small  
Kidney  
Liver

Rectum  
Mesentery Nos

Bile Duct

Mammary gland  
Nasal cavity

Thyroid

Parasitism  
Necrosis, Fat  
Nephropathy  
Cytoplasmic Change, Basophilic  
Hyperplasia, Nos  
Inflammation, Granulomatous Focal  
Cystic Ducts  
Infection, Fungal  
Inflammation, Acute Suppurative  
Lymphocytic Inflammatory Infiltrate  
C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_018

**TRT#:** 3

**DOSE:** 0

**SEX:** Female

**DISP:** Moribund Sacrifice

**DAY ON TEST:**

**HISTO:**

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**OBSERVATIONS**

Liver

Mammary gland

Pancreas

Cytoplasmic Change, Basophilic

Fibroadenoma

Atrophy, Focal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_019

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Brain		Compression, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Necrosis, Nos
Mammary gland		Cystic Ducts
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Carcinoma, Nos
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Chronic Focal
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_020

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Clitoral gland  
Eye

Medulla

Pheochromocytoma  
Atrophy, Nos  
Cataract  
Retinopathy

Heart  
Intestine Small  
Kidney  
Liver

Mesentery Nos

Fibrosis, Multifocal  
Necrosis, Fat  
Nephropathy  
Cytoplasmic Change, Basophilic

Mammary gland  
Nasal cavity  
Thyroid

Bile Duct

Hyperplasia, Nos  
Cystic Ducts  
Lymphocytic Inflammatory Infiltrate  
Cystic Follicles

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_021

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
Heart		Fibrosis, Multifocal
Intestine Large	Rectum	Parasitism
Kidney		Nephropathy
Liver		Inflammation, Granulomatous Focal
Mammary gland		Adenocarcinoma, Nos
		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Skin	Nose	Inflammation, Acute Suppurative
Spleen		Hematopoiesis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_022

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_023

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Large

Kidney

Liver

Rectum

Bile Duct

Mammary gland

Nasal cavity

Pituitary gland

Anterior Pituitary

Anterior Pituitary

Parasitism

Nephropathy

Cytoplasmic Change, Basophilic

Hyperplasia, Nos

Inflammation, Granulomatous Focal

Adenosis

Cystic Ducts

Fibroadenoma

Lymphocytic Inflammatory Infiltrate

Adenoma, Nos

Angiectasis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_024

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye	Nasolacrimal Duct	Dilatation, Nos
Heart		Fibrosis, Multifocal
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_025

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Mammary gland

Nasal cavity

Spleen

Unspecified

Multiple Organs Nos

Cystic Ducts

Lymphocytic Inflammatory Infiltrate

Hematopoiesis

Mesothelioma, Malignant

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_026

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Brain		Granular-Cell Tumor, Nos
Clitoral gland		Cystic Ducts
Eye	Nasolacrimal Duct	Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C53587

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Test Compound: Chlorinated paraffins: C12, 60% chlorine  
CAS Number: 108171-26-2

Date Report Requested: 10/26/2014

Time Report Requested: 16:19:21

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_027

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

**OBSERVATIONS**

Brain		Compression, Nos
Eye	Nasolacrimal Duct	Dilatation, Nos
	Nasolacrimal Duct	Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Necrosis, Focal
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Stomach	Forestomach	Foreign Body, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Granulomatous Focal
	Forestomach	Mineralization
Thyroid		C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_028

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_029

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos
		Cystic Ducts
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Necrosis, Focal
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Skin		Inflammation, Acute/Chronic
Thyroid		C-Cell Adenoma
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_030

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
Clitoral gland		Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
Stomach	Glandular Stomach	Mineralization

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 3\_031

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Eye		Cataract
		Retinopathy
Intestine Large	Cecum, Colon	Ulcer, Nos
Kidney		Nephropathy
Liver		Malposition, Nos
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Ulcer, Nos
Thyroid		C-Cell Adenoma
Urinary bladder		Calculus, Gross Observation Only
Uterus		Endometrial Stromal Sarcoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_032

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Eye	Nasolacrimal Duct	Dilatation, Nos
	Nasolacrimal Duct	Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_033

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Hyperplasia, Focal
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

---

**ANIMAL ID:** 3\_034

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland

Atrophy, Nos

Eye

Nasolacrimal Duct

Dilatation, Nos

Nasolacrimal Duct

Inflammation, Acute Suppurative

Liver

Cytoplasmic Change, Basophilic

Nasal cavity

Lymphocytic Inflammatory Infiltrate

Pituitary gland

Anterior Pituitary

Cyst, Nos

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_035

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Liver

Rectum

Parasitism  
Nephropathy  
Cytoplasmic Change, Basophilic  
Inflammation, Granulomatous Focal

Mammary gland

Cystic Ducts  
Fibroadenoma

Nasal cavity

Lymphocytic Inflammatory Infiltrate

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Anterior Pituitary

Angiectasis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_036

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Spleen		Hematopoiesis
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Ulcer, Nos
Unspecified	Multiple Organs Nos	Sarcoma, Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_037

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Cystic Ducts
Harderian gland	Harderian Gland	Lymphocytic Inflammatory Infiltrate
Heart		Inflammation, Chronic Focal
Intestine Large	Colon	Parasitism
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Ovary		Cyst, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemosiderosis
Spleen		Hematopoiesis
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_038

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Intestine Small	Ileum, Ileum	Neurilemoma
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Nerve, peripheral	Paraganglion Nos	Paraganglioma, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:19:21  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_039

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Fibrosis, Focal
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Perforation, Inflammatory
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_040

**TRT#:** 3

**DOSE:** 0

**SEX:** Female

**DISP:** Terminal Sacrifice

**DAY ON TEST:**

**HISTO:**

---

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Inflammation, Granulomatous Focal
Mammary gland		Cystic Ducts Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_041

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Carcinoma, Nos, Invasive
Eye	Nasolacrimal Duct	Dilatation, Nos
	Nasolacrimal Duct	Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Carcinoma, Nos
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_042

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Clitoral gland		Atrophy, Nos
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas		Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Cyst, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Chlorinated paraffins: C12, 60% chlorine

**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_043

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Brain		Compression, Nos
Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_044

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma, Malignant
Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
		Hypertrophy, Nos
		Mitotic Alteration
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_045

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Compression, Nos
Clitoral gland		Atrophy, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
		Inflammation, Granulomatous Focal
Mammary gland		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
Thyroid		C-Cell Adenoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_046

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart		Fibrosis, Multifocal
Mammary gland		Adenosis
		Cystic Ducts
		Fibroadenoma
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

**ANIMAL ID:** 3\_047

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Intestine Small  
Liver

Mesentery Nos

Necrosis, Fat  
Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Necrosis, Nos

Lymph node  
Mammary gland

Mandibular Lymph Node

Lymphangiectasis

Pituitary gland

Anterior Pituitary

Cystic Ducts

Thyroid

Cyst, Nos

Unspecified

Cystic Follicles

Uterus

Multiple Organs Nos

Leukemia, Mononuclear Cell

Cyst, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_048

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland	Cortex Nos	Necrosis, Focal
Clitoral gland		Atrophy, Nos
Liver	Bile Duct	Hyperplasia, Nos
		Necrosis, Zonal
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pancreas	Islets	Islet-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_049

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Heart		Fibrosis, Multifocal
Liver	Bile Duct	Hyperplasia, Nos
		Necrosis, Zonal
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hemorrhage
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C53587

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Chlorinated paraffins: C12, 60% chlorine  
**CAS Number:** 108171-26-2

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:19:21

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

**Lab:** NA

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**ANIMAL ID:** 3\_050

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Clitoral gland		Atrophy, Nos
Eye	Nasolacrimal Duct	Inflammation, Acute Suppurative
Heart		Fibrosis, Multifocal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
Mammary gland		Cystic Ducts
Nasal cavity		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Angiectasis
Thyroid		C-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

-

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