

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

C Number: C54842

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Male

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_001

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lung		Alveolar/Bronchiolar Carcinoma
Lymph node	Mesenteric Lymph Node	Inflammation, Granulomatous
Parathyroid gland		Hyperplasia, Nos
Preputial gland		Impaction, Nos
Salivary gland		Atrophy, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Shoulder	Cyst, Epidermal Inclusion

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:09
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_002

TRT#: 1
DOSE: 100.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Medulla	Pheochromocytoma
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Anterior Chamber	Inflammation, Chronic Diffuse
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell
Unspecified	Multiple Organs Nos	Mesothelioma, Nos

PRIMARY CAUSE OF DEATH

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Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_003

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
	Atrium	Thrombosis, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Mammary gland		Lactation
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Urinary bladder		Hyperplasia, Epithelial
		Inflammation, Nos

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_004

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Atrophy, Diffuse

Unspecified

Multiple Organs Nos

Congestion, Nos

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:09
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_005

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Angiectasis
		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

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Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_006

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_007

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland		Necrosis, Coagulative
Heart	Cardiac Valve	Inflammation, Acute Focal
Kidney		Nephropathy
		Pyelonephritis, Acute
Liver	Bile Duct	Hyperplasia, Nos
Lung	Pleural Cavity Nos	Inflammation, Acute Fibrinous
Pancreas	Acinus	Atrophy, Diffuse
Peritoneum	Peritoneal Cavity Nos	Inflammation, Acute Fibrinous
Prostate		Inflammation, Nos
Skin	Flank	Sebaceous Adenoma
Spleen		Hematopoiesis
Stomach	Glandular Stomach	Inflammation, Nos
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_008

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Lung		Pigmentation, Nos
Mammary gland		Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Parathyroid gland		Hyperplasia, Nos
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_009

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Pheochromocytoma
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
		Synechia, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney	Pelvis	Inflammation, Acute
		Nephropathy
		Tubular-Cell Adenocarcinoma
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Fibrosis
		Focal Cellular Change
		Hepatocellular Carcinoma
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Nos
Pancreas	Acinus	Atrophy, Diffuse
Parathyroid gland		Hyperplasia, Nos
Testis		Atrophy, Nos
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Urinary bladder		Inflammation, Nos

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_010

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lung		Squamous Cell Carcinoma, Metastatic
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Skin	Neck	Squamous Cell Carcinoma
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_011

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Neoplastic Nodule
Lung		Alveolar/Bronchiolar Carcinoma
Pancreas	Acinus	Atrophy, Focal
Skin	Back	Inflammation, Nos
	Nose	Squamous Cell Papilloma
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_012

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Cyst, Nos
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Hyperplasia, Interstitial Cell
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:09
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_013

TRT#: 1
DOSE: 100.0 MG/KG

SEX: Male
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Hyperplasia, Nos
Spleen		Depletion, Lymphoid
Testis		Atrophy, Nos
		Interstitial-Cell Tumor

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_014

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Pheochromocytoma

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Fibrosis

Pancreas

Bile Duct

Hyperplasia, Nos

Stomach

Acinus

Atrophy, Diffuse

Testis

Glandular Stomach

Inflammation, Nos

Thyroid

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_015

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland		Cortical Adenoma
	Cortex Nos	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
		Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
		Pigmentation, Nos
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_016

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Brain		Hemorrhage
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
		Necrosis, Coagulative
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Salivary gland		Atrophy, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_017

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos	Cytoplasmic Change, Eosinophilic Degeneration, Lipoid
Brain		Hydrocephalus, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Forestomach Glandular Stomach	Hyperplasia, Epithelial Ulcer, Nos
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell
Thyroid		Cyst, Follicular Nos Hyperplasia, C Cell Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_018

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Salivary gland		Atrophy, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
	Tunica Vaginalis	Mesothelioma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_019

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_020

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla Cortex Nos	Degeneration, Lipoid Hyperplasia, Focal Necrosis, Coagulative
Brain		Inflammation, Granulomatous Focal
Esophagus		Inflammation, Chronic
Eye	Retina Crystalline Lens Cornea	Atrophy, Nos Cataract Inflammation, Nos
Heart	Ventricle	Thrombosis, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic Fibrosis
Pancreas	Bile Duct Bile Duct Acinus Acinus Acinus	Hyperplasia, Nos Atrophy, Diffuse Atrophy, Focal Focal Cellular Change
Prostate		Cyst, Nos
Stomach	Fundal Gland Glandular Stomach	Hyperplasia, Nos Ulcer, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_021

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_022

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
		Hepatocellular Carcinoma
	Bile Duct	Hyperplasia, Nos
		Inflammation, Granulomatous
Pancreas	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
Skin	Face	Squamous Cell Papilloma
Testis		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_023

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
		Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Pancreas	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Mesothelioma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:09
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_024

TRT#: 1
DOSE: 100.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lymph node	Mesenteric Lymph Node	Dilatation, Sinus
Stomach	Forestomach	Hyperplasia, Epithelial
	Fundal Gland	Hyperplasia, Nos
	Forestomach	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell
Unspecified	Ear	Cyst, Epidermal Inclusion

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_025

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_026

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Eye	Crystalline Lens	Cataract
	Cornea	Hyperplasia, Epithelial
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
Lung		Congestion, Nos
Lymph node	Mandibular Lymph Node	Hemorrhage
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Seminal vesicle		Atrophy, Nos
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Interstitial-Cell Tumor
	Tunica Vaginalis	Mesothelioma, Nos
Thyroid		Follicular-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_027

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lung		Foreign Material, Nos
		Inflammation, Nos
Pancreas	Acinus	Atrophy, Diffuse
Skeletal muscle		Degeneration, Nos
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_028

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal
Brain		Necrosis, Ischemic
Eye	Retina Crystalline Lens	Atrophy, Nos Cataract
Heart	Cornea Myocardium Nos	Inflammation, Nos Degeneration, Nos
Kidney		Nephrosis, Nos
Liver		Degeneration, Cystic Fibrosis
	Bile Duct Bile Duct	Hyperplasia, Nos Hemorrhage
Lung		Atrophy, Diffuse
Pancreas	Acinus Acinus	Atrophy, Focal Cyst, Nos
Prostate		Atrophy, Nos
Salivary gland		Hyperplasia, Epithelial
Stomach	Forestomach Fundal Gland	Hyperplasia, Nos Interstitial-Cell Tumor
Testis		Hyperplasia, C Cell
Thyroid		Leukemia, Mononuclear Cell
Unspecified	Multiple Organs Nos Multiple Organs Nos	Mesothelioma, Nos Inflammation, Nos
Urinary bladder		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_029

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
		Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Inflammation, Necrotizing
Testis		Atrophy, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_030

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Degeneration, Lipoid Pheochromocytoma
Bone marrow		Hyperplasia, Hematopoietic
Eye	Retina Crystalline Lens Cornea	Atrophy, Nos Cataract Inflammation, Nos Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization Degeneration, Cystic Fibrosis
	Bile Duct Bile Duct	Hyperplasia, Nos Inflammation, Nos
Lung		
Pancreas	Acinus Acinus Acinus	Atrophy, Diffuse Atrophy, Focal Hyperplasia, Nos
Prostate		Inflammation, Nos
Seminal vesicle		Atrophy, Nos
Stomach	Fundal Gland Glandular Stomach	Hyperplasia, Nos Ulcer, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_031

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Bone	Femur	Fibrous Osteodystrophy
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
	Bile Duct	Pigmentation, Nos
Pancreas	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
	Islets	Islet-Cell Adenoma
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin	Chest	Keratoacanthoma
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_032

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Prostate		Inflammation, Nos
		Necrosis, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Urinary bladder		Inflammation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_033

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Metaplasia, Osseous
Lymph node	Mediastinal Lymph Node	Hemorrhage
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Forestomach	Squamous Cell Papilloma
Testis		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:09

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_034

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Thyroid

Unspecified

Myocardium Nos

Bile Duct

Mediastinum Nos

Mediastinum Nos

Cortical Adenoma

Degeneration, Nos

Nephropathy

Hyperplasia, Nos

Cyst, Ultimobranchial

Foreign Body, Vegetable

Inflammation, Granulomatous

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_035

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Pigmentation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_036

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla Cortex Nos	Degeneration, Lipoid Hyperplasia, Focal Hyperplasia, Focal Hypertrophy, Focal
Bone	Femur	Fibrous Osteodystrophy
Bone marrow		Hyperplasia, Hematopoietic
Esophagus		Scar
Eye	Retina Cornea	Atrophy, Nos Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos Mesentery Nos	Hemorrhage Inflammation, Chronic
Kidney	Pelvis	Inflammation, Acute Nephropathy
Liver	Bile Duct Bile Duct	Fibrosis Focal Cellular Change Hyperplasia, Nos Inflammation, Nos
Lung		
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Salivary gland		Dilatation, Ducts
Seminal vesicle		Atrophy, Nos
Skin	Face	Inflammation, Nos
Spleen		Fibrosis
Stomach	Fundal Gland Forestomach	Dilatation, Nos Hyperplasia, Epithelial
Testis		Hyperplasia, Interstitial Cell Infarct, Nos Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_037

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal Pheochromocytoma
Bone marrow		Hyperplasia, Hematopoietic
Epididymis		Inflammation, Nos
Eye	Retina Crystalline Lens Cornea	Atrophy, Nos Cataract Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Dilatation, Sinus
Pancreas	Acinus Acinus	Atrophy, Diffuse Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma Cyst, Ultimobranchial Hyperplasia, C Cell
		Hyperplasia, Follicular Cell
Tongue		Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_038

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization Necrosis, Coagulative
Brain		Hemorrhage
Epididymis		Inflammation, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Degeneration, Cystic
Seminal vesicle	Bile Duct	Hyperplasia, Nos
Stomach	Forestomach	Dilatation, Nos
	Glandular Stomach	Hyperplasia, Epithelial
Testis		Ulcer, Nos
		Atrophy, Nos
Thyroid		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Hyperplasia, C Cell
		Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_039

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Stomach	Glandular Stomach	Inflammation, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_040

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Degeneration, Lipoid Pheochromocytoma
Brain		Carcinoma, Nos, Invasive
Eye	Retina Crystalline Lens Cornea	Atrophy, Nos Cataract Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization Degeneration, Cystic Fibrosis
Pancreas	Bile Duct Bile Duct Acinus Acinus	Hyperplasia, Nos Atrophy, Diffuse Atrophy, Focal Dilatation, Ducts
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Carcinoma, Nos
Prostate		Inflammation, Nos
Seminal vesicle		Inflammation, Nos
Stomach	Fundal Gland Glandular Stomach	Hyperplasia, Nos Inflammation, Nos
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma Hyperplasia, C Cell
Unspecified	Chest	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_041

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal Pheochromocytoma
Heart	Myocardium Nos	Degeneration, Nos
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Stomach	Forestomach Fundal Gland Glandular Stomach	Hyperplasia, Epithelial Hyperplasia, Nos Ulcer, Nos
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 1_042

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_043

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Pancreas

Stomach

Testis

Unspecified

Myocardium Nos

Bile Duct

Bile Duct

Acinus

Glandular Stomach

Multiple Organs Nos

Necrosis, Coagulative

Degeneration, Nos

Nephropathy

Fibrosis

Hyperplasia, Nos

Necrosis, Coagulative

Atrophy, Focal

Ulcer, Nos

Atrophy, Nos

Interstitial-Cell Tumor

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_044

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
	Medulla	Pheochromocytoma
Bone marrow		Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
	Bile Duct	Fibrosis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
Parathyroid gland		Hyperplasia, Nos
Skin		Hyperplasia, Nos
		Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Focal Cellular Change
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_045

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Skin	Abdomen	Keratoacanthoma
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Inflammation, Nos
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
Unspecified	Pelvis	Fibrosarcoma
	Multiple Organs Nos	Leukemia, Mononuclear Cell
	Multiple Organs Nos	Lymphoma, Histiocytic-Malignant Type

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_046

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
	Cortex Nos	Degeneration, Cystic
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Lymph node	Mesenteric Lymph Node	Inflammation, Granulomatous
Pancreas	Acinus	Atrophy, Focal
Parathyroid gland		Hyperplasia, Nos
Prostate		Inflammation, Nos
Skin	Pelvis	Keratoacanthoma
Stomach	Glandular Stomach	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Focal Cellular Change
		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Abdomen	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_047

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
		Follicular-Cell Adenoma
		Follicular-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_048

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Testis		Hyperplasia, Interstitial Cell
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_049

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal Hyperplasia, Focal
Eye	Retina Crystalline Lens	Atrophy, Nos Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic Focal Cellular Change
Pancreas	Bile Duct Acinus Acinus Acinus	Hyperplasia, Nos Atrophy, Diffuse Atrophy, Focal Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Back	Inflammation, Nos
Spleen		Fibrosis
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_050

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
		Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Nos
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Seminal vesicle		Atrophy, Nos
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, Follicular Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_001

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Clear-Cell Change
Prostate		Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_002

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Hyperplasia, Focal
Brain		Thrombosis, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Lymph node	Mediastinal Lymph Node	Plasmacytosis
Mammary gland		Dilatation, Ducts
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Prostate		Inflammation, Nos
Spleen		Hematopoiesis
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Ulcer, Acute
	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos
		Interstitial-Cell Tumor
Thyroid	Tubule	Necrosis, Coagulative
Unspecified	Multiple Organs Nos	Follicular-Cell Carcinoma
		Lymphoma, Histiocytic-Malignant Type

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_003

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
Unspecified	Multiple Organs Nos	Congestion, Nos
Urinary bladder		Calculus, Gross Observation Only

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_004

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cortical Adenoma

Heart

Myocardium Nos

Hyperplasia, Focal

Intestine Large

Colon

Degeneration, Nos

Intestine Small

Mesentery Nos

Parasitism

Kidney

Necrosis, Fat

Liver

Nephropathy

Focal Cellular Change

Pancreas

Bile Duct

Hyperplasia, Nos

Pituitary gland

Acinus

Atrophy, Focal

Prostate

Anterior Pituitary

Adenoma, Nos

Skin

Inflammation, Nos

Testis

Inflammation, Nos

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

C-Cell Adenoma

Follicular-Cell Adenoma

Hyperplasia, C Cell

Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_005

TRT#: 2
DOSE: 050.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Pheochromocytoma
Eye	Crystalline Lens	Cataract
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lung		Hemorrhage
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Stomach	Forestomach	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_006

TRT#: 2
DOSE: 050.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Cytoplasmic Vacuolization Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct Bile Duct	Fibrosis Hyperplasia, Nos
Lymph node	Mesenteric Lymph Node	Dilatation, Sinus
Pancreas	Acinus Acinus Acinus	Atrophy, Diffuse Atrophy, Focal Hyperplasia, Nos
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_007

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Epididymis		Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lung		Alveolar/Bronchiolar Carcinoma
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Prostate		Inflammation, Nos
Skin	Back	Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Inflammation, Nos
Testis		Atrophy, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_008

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Eye

Retina

Atrophy, Nos

Crystalline Lens

Cataract

Heart

Myocardium Nos

Degeneration, Nos

Intestine Small

Mesentery Nos

Necrosis, Fat

Kidney

Nephropathy

Liver

Cytoplasmic Vacuolization

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Testis

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_009

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Atrophy, Diffuse
	Anterior Pituitary	Pigmentation, Nos
Skin		Inflammation, Nos
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Congestion, Nos

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_010

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
Bone marrow		Hyperplasia, Hematopoietic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Cyst, Epidermal Inclusion
Pancreas	Acinus	Atrophy, Diffuse
Parathyroid gland		Adenoma, Nos
Skin	Neck	Inflammation, Nos
Spleen		Hematopoiesis
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_011

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hypertrophy, Focal Pheochromocytoma
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium Inflammation, Nos
Prostate		Cyst, Nos
Testis		Atrophy, Nos
Thyroid		Interstitial-Cell Tumor Follicular-Cell Carcinoma Hyperplasia, C Cell
Unspecified		Hyperplasia, Follicular Cell Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_012

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
Bone marrow		Hyperplasia, Reticulum Cell
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephrosis, Nos
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_013

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
		Inflammation, Granulomatous
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Preputial gland		Adenoma, Nos
		Inflammation, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Pelvis	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_014

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Medulla	Pheochromocytoma
Eye	Retina	Atrophy, Nos
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Islets	Islet-Cell Adenoma
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Urinary bladder		Calculus, Gross Observation Only

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_015

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Cortex Nos

Hyperplasia, Focal

Medulla

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Intestine Small

Mesentery Nos

Inflammation, Chronic

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Mammary gland

Hyperplasia, Nos

Testis

Interstitial-Cell Tumor

Thyroid

C-Cell Adenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_016

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Brain

Medulla

Hyperplasia, Focal

Kidney

Hemorrhage

Liver

Nephropathy

Parathyroid gland

Cytoplasmic Vacuolization

Testis

Adenoma, Nos

Hyperplasia, Interstitial Cell

Unspecified

Multiple Organs Nos

Interstitial-Cell Tumor

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 2_017

TRT#: 2
DOSE: 050.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Prostate		Cyst, Nos
		Inflammation, Nos
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_018

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
	Islets	Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Back	Sebaceous Adenoma
Testis		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell
Unspecified	Chest	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_019

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Salivary gland		Focal Cellular Change
Testis		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos Follicular-Cell Adenoma Hyperplasia, C Cell Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_020

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Abnormal Curvature
		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Fibrosis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Neoplastic Nodule
Pancreas		Cyst, Nos
	Islets	Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Salivary gland		Focal Cellular Change
Spleen		Collapse
		Hemosiderosis
Stomach	Fundal Gland	Hyperplasia, Nos
	Glandular Stomach	Inflammation, Necrotizing
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_021

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla Cortex Nos Myocardium Nos	Degeneration, Lipoid Hyperplasia, Focal Hyperplasia, Focal Hypertrophy, Focal Degeneration, Nos
Heart		Necrosis, Coagulative
Kidney		Degeneration, Cystic
Liver	Bile Duct	Hyperplasia, Nos Necrosis, Coagulative
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_022

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Inflammation, Granulomatous
Kidney		Nephropathy
Liver	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Stomach	Forestomach	Hyperplasia, Epithelial
	Glandular Stomach	Ulcer, Nos
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_023

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Pheochromocytoma

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Inflammation, Acute

Testis

Atrophy, Diffuse

Unspecified

Multiple Organs Nos

Interstitial-Cell Tumor

Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_024

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal Cyst, Nos
Brain		Atrophy, Nos
Eye	Retina	Degeneration, Nos
Heart	Myocardium Nos	Nephropathy
Kidney		Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization Focal Cellular Change
Liver		Hyperplasia, Nos
Mammary gland	Bile Duct	Hyperplasia, Cystic Hyperplasia, Epithelial
Pancreas	Mammary Duct	Atrophy, Diffuse
Pituitary gland	Acinus	Adenoma, Nos
Preputial gland	Anterior Pituitary	Adenocarcinoma, Nos
Prostate		Inflammation, Nos
Stomach	Fundal Gland	Hyperplasia, Nos
	Glandular Stomach	Inflammation, Necrotizing Hyperplasia, Interstitial Cell
Testis		Follicular-Cell Carcinoma
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_025

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Testis		Interstitial-Cell Tumor
Unspecified	Axilla	Fibroma
	Multiple Organs Nos	Leukemia, Mononuclear Cell
	Multiple Organs Nos	Necrosis, Coagulative

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_026

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
	Medulla	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Hyperplasia, Nos
	Islets	Islet-Cell Adenoma
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_027

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Focal Pheochromocytoma
Epididymis		Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic Focal Cellular Change
	Bile Duct	Hyperplasia, Nos Inflammation, Nos
Lung		Dilatation, Ducts
Mammary gland		Hyperplasia, Nos
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Inflammation, Nos
Prostate		Atrophy, Nos
Salivary gland		Keratoacanthoma
Skin	Axilla	Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Testis		Hyperplasia, C Cell
Thyroid		Leukemia, Mononuclear Cell
Unspecified	Multiple Organs Nos	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_028

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain		Hemorrhage
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Stomach	Glandular Stomach	Ulcer, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_029

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Reticulum Cell
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Angiectasis
		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lung		Hemorrhage
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Prostate		Inflammation, Nos
Testis		Atrophy, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_030

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
	Cortex Nos	Degeneration, Lipoid
Epididymis		Inflammation, Nos
Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephrosis, Nos
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
	Islets	Islet-Cell Adenoma
Preputial gland		Impaction, Nos
		Inflammation, Nos
Prostate		Inflammation, Nos
Spleen		Fibrosis
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		C-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Back	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_031

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephrosis, Nos
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Dilatation, Sinus
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_032

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Esophagus		Inflammation, Chronic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Plasmacytosis
Pancreas	Acinus Acinus Acinus	Atrophy, Diffuse Atrophy, Focal Focal Cellular Change
Spleen		Hematopoiesis
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Hyperplasia, Interstitial Cell
Unspecified	Cheek	Interstitial-Cell Tumor Fibrosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_033

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cytoplasmic Vacuolization Degeneration, Lipoid Hyperplasia, Focal Nephropathy
Kidney		Cytoplasmic Vacuolization
Liver		Degeneration, Cystic Hyperplasia, Nos
Mammary gland	Bile Duct	Lactation
Pancreas	Acinus Islets	Atrophy, Diffuse Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Congestion, Nos
Stomach	Forestomach Forestomach Glandular Stomach	Hyperplasia, Epithelial Ulcer, Acute Ulcer, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma Cyst, Follicular Nos Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_034

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Hypertrophy, Focal Pheochromocytoma
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lymph node	Mesenteric Lymph Node	Dilatation, Sinus
Mammary gland		Fibroadenoma Hyperplasia, Nos
Pancreas	Acinus Acinus Islets	Atrophy, Diffuse Atrophy, Focal Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Testis		Atrophy, Nos Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_035

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
		Inflammation, Nos
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Seminal vesicle		Atrophy, Nos
Stomach	Glandular Stomach	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_036

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lymph node	Lumbar Lymph Node	Hemorrhage
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Urinary bladder		Hyperplasia, Epithelial
		Inflammation, Nos
		Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_037

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Spleen		Congestion, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Carcinoma
		Follicular-Cell Adenoma
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_038

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Skin	Foot And Toe Nos	Hyperplasia, Nos
	Foot And Toe Nos	Inflammation, Nos
	Face	Squamous Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_039

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos	Cytoplasmic Vacuolization Hyperplasia, Focal
Brain		Hemorrhage
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization
Mammary gland		Hyperplasia, Cystic
Pancreas	Acinus Acinus	Atrophy, Diffuse Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Seminal vesicle		Atrophy, Nos
Stomach	Forestomach Glandular Stomach Forestomach Glandular Stomach Forestomach	Hyperplasia, Epithelial Inflammation, Necrotizing Inflammation, Nos Inflammation, Nos Ulcer, Acute
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_040

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Medulla	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Islets	Islet-Cell Adenoma
Spleen		Fibrosis
Stomach	Glandular Stomach	Inflammation, Necrotizing
Testis		Interstitial-Cell Tumor
Thymus		Cyst, Nos
Thyroid		C-Cell Adenoma
		C-Cell Carcinoma
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_041

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic Focal Cellular Change
Mammary gland	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Hyperplasia, Cystic Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Inflammation, Chronic Adenoma, Nos
Skin	Abdomen	Keratoacanthoma
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_042

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
	Bile Duct	Fibrosis
	Bile Duct	Hyperplasia, Nos
		Inflammation, Granulomatous
Lymph node	Mandibular Lymph Node	Dilatation, Sinus
Mammary gland		Hyperplasia, Nos
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Stomach	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Nos
	Forestomach	Squamous Cell Papilloma
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Urinary bladder		Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_043

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Degeneration, Cystic

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Atrophy, Diffuse

Pituitary gland

Anterior Pituitary

Hyperplasia, Chromophobe Cell

Testis

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

Unspecified

Multiple Organs Nos

C-Cell Carcinoma

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_044

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_045

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
Parathyroid gland		Hyperplasia, Nos
Seminal vesicle		Atrophy, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_046

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephrosis, Nos
Liver	Bile Duct	Fibrosis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_047

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Degeneration, Cystic Fibrosis
	Bile Duct	Focal Cellular Change Hyperplasia, Nos Neoplastic Nodule
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Chest	Hyperplasia, Follicular Cell Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_048

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone marrow

Atrophy, Nos

Eye

Crystalline Lens

Hyperplasia, Reticulum Cell

Heart

Myocardium Nos

Cataract

Kidney

Degeneration, Nos

Liver

Nephropathy

Cytoplasmic Vacuolization

Focal Cellular Change

Pituitary gland

Bile Duct

Hyperplasia, Nos

Testis

Anterior Pituitary

Adenoma, Nos

Thyroid

Interstitial-Cell Tumor

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_049

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Cystic
Pancreas	Islets	Atrophy, Nos
	Islets	Islet-Cell Adenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Colloid
Stomach	Glandular Stomach	Inflammation, Nos
Testis		Angiectasis
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_050

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Ileum, Ileum	Hyperplasia, Lymphoid
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lymph node	Mesenteric Lymph Node	Dilatation, Sinus
	Pancreatic Lymph Node	Inflammation, Granulomatous Focal
Pancreas	Acinus	Atrophy, Focal
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Neck	Keratoacanthoma
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_001

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Pancreas

Bile Duct

Hyperplasia, Nos

Testis

Duct Nos

Hyperplasia, Nos

Thyroid

Interstitial-Cell Tumor

Follicular-Cell Adenoma

Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_002

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
Brain		Hemorrhage
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
	Bile Duct	Hyperplasia, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_003

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone marrow

Heart

Kidney

Liver

Myocardium Nos

Bile Duct

Testis

Hyperplasia, Reticulum Cell

Degeneration, Nos

Nephropathy

Cytoplasmic Change, Basophilic

Degeneration, Cystic

Hyperplasia, Nos

Neoplastic Nodule

Interstitial-Cell Tumor

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_004

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal
Bone marrow		Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization Hyperplasia, Nodular
	Bile Duct	Hyperplasia, Nos Necrosis, Coagulative
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary Anterior Pituitary	Angiectasis Hyperplasia, Chromophobe Cell
Testis		Atrophy, Nos Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_005

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Cortex Nos

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Angiectasis

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Atrophy, Focal

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Testis

Interstitial-Cell Tumor

Thyroid

C-Cell Adenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_006

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Degeneration, Cystic
		Hyperplasia, Nos
		Inflammation, Granulomatous
Lung		Inflammation, Nos
Lymph node	Mandibular Lymph Node	Dilatation, Sinus
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Foot And Toe Nos	Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Carcinoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_007

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Pheochromocytoma
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Cyst, Multiple
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Skin	Shoulder	Keratoacanthoma
Spleen		Congestion, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_008

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Degeneration, Lipoid
Brain	Thalamus	Atrophy, Pressure
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Testis		Atrophy, Nos
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_009

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Colloid
Prostate		Inflammation, Nos
Stomach	Glandular Stomach	Inflammation, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_010

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
Brain		Hemorrhage
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Mammary gland		Hyperplasia, Cystic
Prostate		Inflammation, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Hyperplasia, Interstitial Cell
Thyroid		Cyst, Follicular Nos
		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Urinary bladder		Hemorrhage

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_011

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Hyperplasia, Focal
Bone marrow		Inflammation, Granulomatous Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Nos
Lymph node	Mediastinal Lymph Node	Inflammation, Chronic Diffuse
	Mandibular Lymph Node	Plasmacytosis
Mammary gland		Galactocele
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Salivary gland		Focal Cellular Change
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_012

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Nos

Testis

Hyperplasia, Interstitial Cell

Unspecified

Multiple Organs Nos

Interstitial-Cell Tumor

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_013

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Hyperplasia, Nos
Pancreas	Bile Duct Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Preputial gland		Sebaceous Adenoma
Testis		Atrophy, Nos Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_014

TRT#: 3
DOSE: 0

SEX: Male
DISP: Natural Death

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Degeneration, Lipoid Hyperplasia, Focal
Bone	Femur	Fibrous Osteodystrophy
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos Necrosis, Coagulative
Lung		Inflammation, Nos
Lymph node	Mesenteric Lymph Node	Inflammation, Granulomatous
Pancreas	Acinus	Atrophy, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Unspecified	Multiple Organs Nos Multiple Organs Nos	Congestion, Nos Mineralization

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_015

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Change, Eosinophilic

Cortex Nos

Cytoplasmic Vacuolization

Heart

Myocardium Nos

Degeneration, Nos

Intestine Large

Colon

Parasitism

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Atrophy, Diffuse

Pituitary gland

Anterior Pituitary

Hyperplasia, Chromophobe Cell

Spleen

Hemosiderosis

Testis

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

Cyst, Follicular Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_016

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland		Fibroadenoma
Parathyroid gland		Adenoma, Nos
Salivary gland		Focal Cellular Change
Skin	Tail	Squamous Cell Papilloma
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_017

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Degeneration, Cystic Focal Cellular Change
Pituitary gland	Bile Duct Anterior Pituitary Anterior Pituitary	Hyperplasia, Nos Cyst, Colloid Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_018

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
	Acinus	Atrophy, Focal
		Dilatation, Ducts
Pituitary gland	Acinus	Focal Cellular Change
Testis	Anterior Pituitary	Cyst, Colloid
Thyroid		Interstitial-Cell Tumor
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_019

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Pheochromocytoma
Epididymis		Leiomyosarcoma
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Cyst, Nos
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Fibrosis, Condensation
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Diffuse
		Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Seminal vesicle		Atrophy, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_020

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos	Degeneration, Lipoid Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic Cytoplasmic Vacuolization Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
Testis	Acinus	Atrophy, Focal
Thyroid		Hyperplasia, Interstitial Cell Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_021

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Testis		Interstitial-Cell Tumor
	Tunica Vaginalis	Mesothelioma, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Urinary bladder		Transitional-Cell Papilloma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_022

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
	Cortex Nos	Hyperplasia, Focal
Eye	Retina	Atrophy, Nos
	Cornea	Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Angiectasis
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_023

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Change, Eosinophilic Hyperplasia, Focal
Bone marrow		Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Nos
Pancreas	Duct Nos	Hyperplasia, Nos
Parathyroid gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Hair Follicle	Hyperplasia, Nos Keratoacanthoma
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_024

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Degeneration, Cystic

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Testis

Interstitial-Cell Tumor

Thyroid

Hyperplasia, C Cell

Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_025

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Focal Cellular Change

Pancreas

Bile Duct

Hyperplasia, Nos

Testis

Acinus

Hyperplasia, Nos

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_026

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Brain		Choroid Plexus Papilloma
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Jejunum	Inflammation, Chronic
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Flank	Fibroma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_027

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Small

Cortex Nos
Myocardium Nos
Ileum, Ileum
Ileum, Ileum

Degeneration, Lipoid
Degeneration, Nos
Inflammation, Acute/Chronic
Ulcer, Healed

Kidney
Liver

Nephropathy
Cytoplasmic Change, Basophilic
Degeneration, Cystic
Focal Cellular Change

Pancreas

Bile Duct
Acinus
Duct Nos

Hyperplasia, Nos
Atrophy, Focal
Hyperplasia, Nos

Testis

Hyperplasia, Interstitial Cell
Interstitial-Cell Tumor

Thyroid

Cyst, Follicular Nos
Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_028

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Cortex Nos	Necrosis, Coagulative
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Lung		Inflammation, Nos
Mammary gland		Dilatation, Ducts
Pancreas	Acinus	Atrophy, Diffuse
Prostate		Inflammation, Nos
Seminal vesicle		Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
		Hyperplasia, C Cell
Trachea		Inflammation, Acute

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_029

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
	Cortex Nos	Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Heart	Myocardium Nos	Degeneration, Nos
	Atrium	Thrombosis, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
		Necrosis, Coagulative
Lung		Inflammation, Nos
Mammary gland		Dilatation, Ducts
Pancreas	Acinus	Atrophy, Diffuse
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Mesothelioma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_030

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Focal Cellular Change

Pancreas

Bile Duct

Hyperplasia, Nos

Skin

Acinus

Atrophy, Focal

Testis

Chest

Keratoacanthoma

Atrophy, Nos

Thyroid

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

C-Cell Adenoma

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_031

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Cytoplasmic Vacuolization

Cortex Nos

Degeneration, Lipoid

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Necrosis, Coagulative

Testis

Atrophy, Diffuse

Unspecified

Multiple Organs Nos

Hyperplasia, Interstitial Cell

Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_032

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Salivary gland		Focal Cellular Change
Spleen		Fibrosis
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_033

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Bone marrow		Hyperplasia, Hematopoietic
Kidney		Nephropathy
Liver		Hyperchromatism
	Bile Duct	Hyperplasia, Nos
Lung	Pleura Nos	Inflammation, Chronic
Seminal vesicle		Dilatation, Nos
Spleen		Hematopoiesis
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell
Unspecified	Pelvis	Myxosarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_034

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Cyst, Nos
		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
	Tunica Vaginalis	Mesothelioma, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_035

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Pheochromocytoma
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver	Bile Duct	Fibrosis Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Stomach	Forestomach	Hyperplasia, Epithelial
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Follicular-Cell Adenoma
Unspecified	Multiple Organs Nos	Hyperplasia, C Cell Mesothelioma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_036

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Hyperplasia, Focal

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Parathyroid gland

Hyperplasia, Nos

Pituitary gland

Anterior Pituitary

Adenoma, Nos

Testis

Anterior Pituitary

Hyperplasia, Chromophobe Cell

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_037

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Necrosis, Coagulative

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Nos

Pancreas

Acinus

Atrophy, Diffuse

Testis

Hyperplasia, Interstitial Cell

Trachea

Interstitial-Cell Tumor

Unspecified

Multiple Organs Nos

Inflammation, Chronic

Congestion, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_038

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Pheochromocytoma
Eye	Retina	Atrophy, Nos
	Crystalline Lens	Cataract
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas		Dilatation, Ducts
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Prostate		Inflammation, Nos
Spleen		Fibrosis
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_039

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Clear-Cell Change
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Fibroadenoma
Pancreas	Acinus	Atrophy, Focal
	Duct Nos	Hyperplasia, Nos
Preputial gland		Adenoma, Nos
		Impaction, Nos
		Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_040

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Heart
Intestine Large
Kidney
Liver

Cortex Nos
Myocardium Nos
Colon

Hyperplasia, Focal
Degeneration, Nos
Cyst, Epidermal Inclusion
Nephropathy
Cytoplasmic Change, Basophilic
Hepatocellular Carcinoma
Hyperplasia, Nos
Acinar-Cell Adenoma
Interstitial-Cell Tumor
C-Cell Adenoma
Hyperplasia, C Cell

Bile Duct

Pancreas
Testis
Thyroid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_041

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal
Bone marrow		Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Necrosis, Fat
Kidney		Nephropathy
Liver	Bile Duct	Cytoplasmic Change, Basophilic Fibrosis Hepatocellular Carcinoma
Pancreas	Bile Duct	Hyperplasia, Nos
Skin	Acinus	Focal Cellular Change
Testis	Back	Papilloma, Nos Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Urinary bladder		Calculus, Gross Observation Only

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_042

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Atrophy, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Hyperplasia, Alveolar Epithelium
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin	Back	Fibrosis
	Back	Inflammation, Nos
	Back	Ulcer, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_043

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Degeneration, Cystic Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
Pituitary gland	Acinus	Atrophy, Focal
Preputial gland	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Adenoma, Nos Atrophy, Nos Inflammation, Nos Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma C-Cell Carcinoma Hyperplasia, C Cell Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_044

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla Cortex Nos	Cytoplasmic Vacuolization Degeneration, Lipoid Hyperplasia, Focal Hypertrophy, Focal
Epididymis		Fibrosis
Eye	Retina Crystalline Lens Cornea	Atrophy, Nos Cataract Inflammation, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
Pituitary gland	Acinus	Atrophy, Focal
Salivary gland	Anterior Pituitary	Adenoma, Nos
Stomach		Focal Cellular Change
Testis	Forestomach	Hyperplasia, Epithelial
Thyroid		Hyperplasia, Interstitial Cell C-Cell Adenoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_045

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal
	Medulla	Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Focal
	Islets	Islet-Cell Carcinoma
Pituitary gland	Anterior Pituitary	Cyst, Colloid
	Anterior Pituitary	Hyperplasia, Chromophobe Cell
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_046

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos Inflammation, Acute/Chronic
Kidney		Cyst, Hemorrhagic Nephropathy
Liver	Bile Duct	Cytoplasmic Change, Basophilic Fibrosis
	Bile Duct	Focal Cellular Change Hyperplasia, Nos
Lung		Alveolar Macrophages
Pancreas	Acinus	Atrophy, Focal
Preputial gland		Inflammation, Nos
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_047

TRT#: 3
DOSE: 0

SEX: Male
DISP: Moribund Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Focal Hyperplasia, Focal
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct Bile Duct	Fibrosis Hyperplasia, Nos Necrosis, Coagulative
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Preputial gland		Adenoma, Nos Inflammation, Nos
Spleen		Necrosis, Coagulative
Stomach	Glandular Stomach	Inflammation, Necrotizing
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_048

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal Pheochromocytoma
Bone marrow		Hyperplasia, Hematopoietic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Prostate		Inflammation, Nos
Skin	Back	Sebaceous Adenocarcinoma
Spleen		Hematopoiesis
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C54842

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Malonaldehyde, sodium salt

CAS Number: 24382-04-5

Date Report Requested: 10/26/2014

Time Report Requested: 17:36:10

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_049

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Cortex Nos

Degeneration, Lipoid

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Cytoplasmic Vacuolization

Focal Cellular Change

Pancreas

Bile Duct

Hyperplasia, Nos

Pituitary gland

Acinus

Atrophy, Focal

Testis

Anterior Pituitary

Adenoma, Nos

Thyroid

Inflammation, Nos

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C54842
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Malonaldehyde, sodium salt
CAS Number: 24382-04-5

Date Report Requested: 10/26/2014
Time Report Requested: 17:36:10
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_050

TRT#: 3
DOSE: 0

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Change, Eosinophilic
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
		Degeneration, Cystic
		Focal Cellular Change
Pancreas	Bile Duct	Hyperplasia, Nos
	Acinus	Atrophy, Focal
	Acinus	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Cyst, Follicular Nos
		Hyperplasia, C Cell
		Hyperplasia, Follicular Cell

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE