

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

C Number:	C92013
Lock Date:	01/12/1995
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-1

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Parathyroid Gland

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 2

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-2

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-3

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Intestine Large, Cecum
* Intestine Small, Ileum
* Liver
* Mammary Gland
* Peripheral Nerve
* Salivary Glands
* Spinal Cord
* Testes
* Urinary Bladder

* Adrenal Medulla
* Brain
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lung
* Nose
* Pituitary Gland
* Seminal Vesicle
* Spleen
* Thymus

* Blood Vessel
* Epididymis
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mandibular
* Pancreas
* Preputial Gland
* Skeletal Muscle
* Stomach, Forestomach
* Thyroid Gland

* Bone
* Esophagus
* Intestine Small, Duodenum
* Kidney
* Lymph Node, Mesenteric
* Parathyroid Gland
* Prostate
* Skin
* Stomach, Glandular
* Trachea

OBSERVATIONS

* Heart

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-4

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Peripheral Nerve	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle	* Skin	* Spinal Cord	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Heart	Inflammation	Focal, Minimal
* Lung	Inflammation	Focal, Minimal
* Lymph Node, Mandibular	Hemorrhage	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 5	TRT#: 1	SEX: Male	DAY ON TEST: 92
	DOSE: UNTREAT CONTROL	DISP: Terminal Sacrifice	HISTO: MB204G-5

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Prostate	Inflammation	Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 6	TRT#: 1	SEX: Male	DAY ON TEST: 92
	DOSE: UNTREAT CONTROL	DISP: Terminal Sacrifice	HISTO: MB204G-6

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Heart		Inflammation	Focal, Minimal
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lung		Inflammation	Focal, Minimal
* Lymph Node, Mandibular		Hemorrhage	Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-7

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Lung	Inflammation	Focal, Minimal
* Spleen	Hematopoietic Cell Proliferation	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 8	TRT#: 1	SEX: Male	DAY ON TEST: 92
	DOSE: UNTREAT CONTROL	DISP: Terminal Sacrifice	HISTO: MB204G-8

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart	Artery	Inflammation	Minimal
* Testes		Degeneration	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-9

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Lung	Inflammation	Focal, Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 10	TRT#: 1	SEX: Male	DAY ON TEST: 92
	DOSE: UNTREAT CONTROL	DISP: Terminal Sacrifice	HISTO: MB204G-10

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle	* Skin	* Spinal Cord
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Nose	Respirat Epith	Inflammation	Suppurative, Moderate
Note: NASAL INFLAMMATION CAUSED BY A FUNGAL ORGANISM.			
* Prostate		Inflammation	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 12

TRT#: 2

SEX: Male

DAY ON TEST: 92

DOSE: 625 PPM

DISP: Terminal Sacrifice

HISTO: G-12

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 15

TRT#: 2

SEX: Male

DAY ON TEST: 92

DOSE: 625 PPM

DISP: Terminal Sacrifice

HISTO: G-15

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

* Testes

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 16

TRT#: 2

SEX: Male

DAY ON TEST: 92

DOSE: 625 PPM

DISP: Terminal Sacrifice

HISTO: G-16

OBSERVATIONS

* Prostate

Atrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 21

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-21

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Testes

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

* Prostate

Inflammation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 22

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Accidentally Killed

HISTO: MB204G-22

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Prostate

* Testes

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 23

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-23

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Prostate

* Testes

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 24

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-24

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Prostate

* Testes

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 25

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-25

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

* Prostate

Inflammation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 26

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-26

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 27

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-27

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Testes

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

* Prostate

Inflammation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 28

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-28

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

* Prostate

Atrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 29

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-29

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Prostate

* Testes

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 30

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-30

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Prostate

* Testes

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 31

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-31

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Vacuolization Cytoplasmic TGLS = 1-8]			
* Prostate		Atrophy	Minimal
Note: NOTE: PROSTATE LACKS SECRETORY PRODUCT.			
* Testes		Degeneration	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 32

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-32

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Mild
[Vacuolization Cytoplasmic TGLS = 1-8]			
* Lung		Inflammation	Focal, Minimal
* Testes		Degeneration	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 34

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-34

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Mild

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 35

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-35

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Moderate

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 36

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-36

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 37

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-37

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Mild

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 38

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-38

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Moderate

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 39

TRT#: 4

SEX: Male

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-39

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

* Testes

OBSERVATIONS

* Liver

Hepatocyte

Inflammation

Focal, Mild

Vacuolization Cytoplasmic

Mild

[Vacuolization Cytoplasmic TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 40	TRT#: 4	SEX: Male	DAY ON TEST: 92
	DOSE: 2500 PPM	DISP: Terminal Sacrifice	HISTO: MB204G-40

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL			
* Prostate			
OBSERVATIONS			
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Testes		Degeneration	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 42

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-42

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[Vacuolization Cytoplasmic TGLS = 1-8]		
* Lung	Alveolar Epith	Hyperplasia	Marked
		Inflammation	Focal, Mild
* Prostate		Atrophy	Minimal
	Note: PROSTATE LACKS SECRETORY PRODUCT.		
* Testes		Degeneration	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 44

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-44

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Prostate

OBSERVATIONS

* Adren Cortex

Note: TGL 1-NCL

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Moderate

[Vacuolization Cytoplasmic TGLS = 2-8]

* Lung

Inflammation

Focal, Mild

* Testes

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 45

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-45

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Moderate

* Prostate

Atrophy

Minimal

Note: PROSTATE LACKS SECRETORY PRODUCT.

* Testes

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 48

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-48

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Vacuolization Cytoplasmic TGLS = 1-8]			
* Lung		Inflammation	Focal, Minimal
* Prostate		Atrophy	Minimal
		Inflammation	Mild
Note: PROSTATE LACKS SECRETORY PRODUCT.			
* Testes		Degeneration	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 49

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-49

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Prostate

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Vacuolization Cytoplasmic TGLS = 1-8]			
* Lung		Inflammation	Focal, Minimal
* Spleen		Congestion	Mild
[Congestion TGLS = 2-8]			
* Testes		Degeneration	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 50

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-50

OBSERVATIONS

* Adren Cortex

Note: PROSTATE LACKS SECRETORY PRODUCT.

* Liver Hepatocyte

Vacuolization Cytoplasmic

Moderate

[Vacuolization Cytoplasmic TGLS = 2-8]

* Prostate

Atrophy

Mild

Note: PROSTATE LACKS SECRETORY PRODUCT.

[Atrophy TGLS = 1-9A]

* Testes

Degeneration

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 51

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-51

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Peripheral Nerve	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Adrenal Medulla

OBSERVATIONS

* Epididymis		Hypospermia	
* Heart		Inflammation	Focal, Minimal
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[Vacuolization Cytoplasmic TGLS = 1-8]		
* Prostate		Atrophy	Moderate
		Inflammation	Minimal
	Note: PROSTATE LACKS SECRETORY PRODUCT.		
	[Atrophy TGLS = 4-9A]		
* Testes		Degeneration	Moderate
	[Degeneration TGLS = 3-9]		

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 2-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 52

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-52

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Peripheral Nerve	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skeletal Muscle	* Skin	* Spinal Cord	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Adrenal Medulla	* Pituitary Gland
-------------------	-------------------

OBSERVATIONS

* Epididymis		Hypospermia	
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[Vacuolization Cytoplasmic TGLS = 3-8]		
* Lung		Inflammation	Focal, Minimal
* Pancreas	Acinus	Degeneration	Focal, Minimal
* Prostate		Atrophy	Mild
		Inflammation	Mild
	Note: PROSTATE LACKS SECRETORY PRODUCT.		
* Testes		Degeneration	Moderate
	[Degeneration TGLS = 2-9]		

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 53

TRT#: 6

SEX: Male

DAY ON TEST: 4

DOSE: 10000 PPM

DISP: Natural Death

HISTO: MB204G-53

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Brain	* Lymph Node, Mesenteric	* Mammary Gland	* Preputial Gland
* Prostate	* Seminal Vesicle	* Skeletal Muscle	* Skin
* Urinary Bladder			

MISSING

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Esophagus	* Heart	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Nose	* Pancreas	* Parathyroid Gland	* Peripheral Nerve
* Pituitary Gland	* Salivary Glands	* Spinal Cord	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Brain			
Note: TGL 1-NCL			
* Epididymis		Hypospermia	
* Testes		Hypospermia	

PRIMARY CAUSE OF DEATH

-

Animal Note: CAVITY- CRANIAL, FLUID, RED TGL 2-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 54

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-54

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Salivary Glands | * Seminal Vesicle | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Spinal Cord

OBSERVATIONS

- | | | | |
|--------------|--|---------------------------|---------------|
| * Epididymis | | Hypospermia | |
| * Heart | | Inflammation | Focal, Marked |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 3-8] | | |
| * Lung | | Inflammation | Focal, Mild |
| * Prostate | | Inflammation | Mild |
| * Testes | | Degeneration | Marked |
| | [Degeneration TGLS = 2-9] | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 55

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-55

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Parathyroid Gland |
| * Peripheral Nerve | * Pituitary Gland | * Preputial Gland | * Salivary Glands |
| * Seminal Vesicle | * Skeletal Muscle | * Skin | * Spinal Cord |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------|--|---------------------------|----------------|
| * Epididymis | | Hypospermia | |
| * Heart | Artery | Inflammation | Mild |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 2-8] | | |
| * Lung | | Inflammation | Focal, Minimal |
| * Pancreas | Acinus | Degeneration | Focal, Mild |
| * Prostate | | Atrophy | Minimal |
| | | Inflammation | Minimal |
| | Note: PROSTATE LACKS SECRETORY PRODUCT. | | |
| * Testes | | Degeneration | Moderate |
| | [Degeneration TGLS = 1-9] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 56

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-56

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|--------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Salivary Glands | * Seminal Vesicle | * Skeletal Muscle | * Skin |
| * Spinal Cord | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- | | | | |
|--------------|--|---------------------------|----------------|
| * Epididymis | | Hypospermia | |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 2-8] | | |
| * Lung | | Inflammation | Focal, Minimal |
| * Prostate | | Atrophy | Mild |
| | | Inflammation | Mild |
| | Note: PROSTATE LACKED SECRETORY PRODUCT. | | |
| * Testes | | Degeneration | Moderate |
| | [Degeneration TGLS = 1-9] | | |
| * Thymus | | Hemorrhage | Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 57

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-57

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Peripheral Nerve | * Pituitary Gland | * Preputial Gland | * Salivary Glands |
| * Seminal Vesicle | * Skeletal Muscle | * Skin | * Spinal Cord |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------------------|--|---------------------------|----------------|
| * Epididymis | | Hypospermia | |
| * Heart | | Inflammation | Focal, Mild |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 3-8] | | |
| * Lung | | Inflammation | Focal, Minimal |
| * Lymph Node, Mesenteric | | Hemorrhage | Minimal |
| * Prostate | | Atrophy | Mild |
| | | Inflammation | Minimal |
| | Note: PROSTATE LACKED SECRETORY PRODUCT. | | |
| * Testes | | Degeneration | Moderate |
| | [Degeneration TGLS = 2-9] | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 58

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-58

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lymph Node, Mandibular | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Salivary Glands | * Seminal Vesicle | * Skeletal Muscle | * Skin |
| * Spinal Cord | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------------------|--|---------------------------|-------------|
| * Epididymis | | Hypospermia | |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 2-8] | | |
| * Lung | | Inflammation | Focal, Mild |
| * Lymph Node, Mesenteric | | Hemorrhage | Minimal |
| * Prostate | | Atrophy | Mild |
| | Note: PROSTATE LACKED SECRETORY PRODUCT. | | |
| * Testes | | Degeneration | Moderate |
| | [Degeneration TGLS = 1-9] | | |
| * Thymus | | Hemorrhage | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 59

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-59

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skeletal Muscle	* Skin	* Spinal Cord
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Epididymis		Hypospermia	
* Heart		Inflammation	Focal, Mild
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[Vacuolization Cytoplasmic TGLS = 1-8]		
* Lung		Inflammation	Focal, Minimal
* Prostate		Atrophy	Minimal
		Inflammation	Mild
	Note: PROSTATE LACKED SECRETORY PRODUCT.		
* Testes		Degeneration	Moderate
	[Degeneration TGLS = 2-9]		
* Thymus		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 60

TRT#: 6

SEX: Male

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-60

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Peripheral Nerve | * Pituitary Gland |
| * Preputial Gland | * Salivary Glands | * Seminal Vesicle | * Skeletal Muscle |
| * Skin | * Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|------------|--|---------------------------|----------------|
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Vacuolization Cytoplasmic TGLS = 1-8] | | |
| * Lung | | Inflammation | Focal, Minimal |
| * Prostate | | Atrophy | Mild |
| | | Inflammation | Minimal |
| | Note: PROSTATE LACKS SECRETORY PRODUCT. | | |
| | [Atrophy TGLS = 4-9A] | | |
| * Testes | | Degeneration | Moderate |
| | [Degeneration TGLS = 3-9] | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 2-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 61

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-61

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Spleen	Pigmentation	Diffuse, Mild
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 62

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-62

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Lung	Inflammation	Focal, Mild
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 63

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-63

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Mammary Gland
- * Pituitary Gland
- * Spinal Cord
- * Thymus

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Nose
- * Salivary Glands
- * Spleen
- * Thyroid Gland

- * Blood Vessel
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Pancreas
- * Skeletal Muscle
- * Stomach, Forestomach
- * Trachea

- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Peripheral Nerve
- * Skin
- * Stomach, Glandular
- * Urinary Bladder

MISSING

- * Parathyroid Gland

OBSERVATIONS

* Lung		Inflammation	Focal, Minimal
* Ovary	Bursa	Cyst	Mild
* Uterus	Bilateral	Dilatation	Mild

[Dilatation TGLS = 1-9]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 64

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-64

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

AUTO PRECLUDES DIAG.

* Intestine Small, Jejunum

OBSERVATIONS

* Heart	Artery	Inflammation	Moderate
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:25

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 65

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-65

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Lymph Node, Mesenteric
* Pancreas
* Salivary Glands
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Liver
* Mammary Gland
* Parathyroid Gland
* Skeletal Muscle
* Stomach, Forestomach
* Trachea

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lung
* Nose
* Peripheral Nerve
* Skin
* Stomach, Glandular
* Urinary Bladder

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mandibular
* Ovary
* Pituitary Gland
* Spinal Cord
* Thymus
* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 66

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-66

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Ovary
* Salivary Glands
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lymph Node, Mandibular
* Pancreas
* Skeletal Muscle
* Stomach, Forestomach
* Trachea

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Mammary Gland
* Peripheral Nerve
* Skin
* Stomach, Glandular
* Urinary Bladder

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Nose
* Pituitary Gland
* Spinal Cord
* Thymus
* Uterus

MISSING

* Parathyroid Gland

OBSERVATIONS

* Liver
[Hepatodiaphragmatic Nodule TGLS = 1-8]
* Lung
* Lymph Node, Mesenteric

Hepatodiaphragmatic Nodule

Inflammation
Infiltration Cellular

Focal, Minimal
Histiocyte, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 67

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-67

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Lung		Inflammation	Focal, Minimal
* Pancreas	Acinus	Degeneration	Focal, Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 68

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-68

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Pituitary Gland	Pars Distalis	Cyst	Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 69

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Terminal Sacrifice

HISTO: MB204G-69

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Parathyroid Gland

OBSERVATIONS

* Lung		Inflammation	Focal, Minimal
* Spleen		Pigmentation	Diffuse, Mild
* Uterus	Bilateral	Dilatation	Mild
[Dilatation TGLS = 1-9]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 70

TRT#: 7

SEX: Female

DAY ON TEST: 92

DOSE: UNTREAT CONTROL

DISP: Accidentally Killed

HISTO: MB204G-70

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Peripheral Nerve	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle
* Skin	* Spinal Cord	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Parathyroid Gland

OBSERVATIONS

* Bone Marrow		Infiltration Cellular	Histiocyte, Focal, Minimal
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 2-5]			
* Uterus	Bilateral	Dilatation	Mild
[Dilatation TGLS = 1-9]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 77

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 625 PPM

DISP: Accidentally Killed

HISTO: MB204G-77

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 79

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 625 PPM

DISP: Accidentally Killed

HISTO: G-79

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 83

TRT#: 9

SEX: Female

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Terminal Sacrifice

HISTO: G-83

OBSERVATIONS

* Uterus

Bilateral

Dilatation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 86

TRT#: 9

SEX: Female

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Accidentally Killed

HISTO: MB204G-86

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 87

TRT#: 9

SEX: Female

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Accidentally Killed

HISTO: MB204G-87

OBSERVATIONS

* Uterus

Bilateral

Cyst

Mild

Bilateral

Dilatation

Mild

[Cyst TGLS = 1-9]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 89

TRT#: 9

SEX: Female

DAY ON TEST: 92

DOSE: 1250 PPM

DISP: Accidentally Killed

HISTO: G-89

OBSERVATIONS

* Uterus

Bilateral

Dilatation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 90

TRT#: 9

SEX: Female

DAY ON TEST: 57

DOSE: 1250 PPM

DISP: Moribund Sacrifice

HISTO: MB204G-90

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Ileum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve | * Pituitary Gland | * Salivary Glands |
| * Skeletal Muscle | * Skin | * Spinal Cord | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

- * Thymus

AUTO PRECLUDES DIAG.

- | | |
|-----------------------------|----------------------------|
| * Intestine Small, Duodenum | * Intestine Small, Jejunum |
|-----------------------------|----------------------------|

OBSERVATIONS

- | | | | |
|---------------------------|----------------|--------------|-------------------|
| * Adren Cortex | | | |
| Note: TGL 6-NCL | | | |
| * Int Lg Cecum | | | |
| Note: TGL 1-NCL | | | |
| * Int Lg Colon | | | |
| Note: TGL 3-NCL | | | |
| * Int Sm Duoden | | | |
| Note: TGL 2-NCL | | | |
| * Liver | | Congestion | Mild |
| [Congestion TGLS = 4-8] | | | |
| * Lung | | Congestion | Mild |
| * Nose | Respirat Epith | Inflammation | Suppurative, Mild |
| * Spleen | | Pigmentation | Diffuse, Mild |

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 5-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 91

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-91

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

OBSERVATIONS

* Uterus

Bilateral

Dilatation

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 92

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-92

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 93

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-93

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 94

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-94

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 95

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-95

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 96

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-96

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

OBSERVATIONS

* Ovary

Cyst

Mild

[Cyst TGLS = 1-9]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 97

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-97

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Uterus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-8]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 98

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-98

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 99

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Accidentally Killed

HISTO: MB204G-99

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 100

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 2500 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-100

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 101

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-101

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Uterus

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 102

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-102

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 103

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-103

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Uterus

OBSERVATIONS

* Liver

Inflammation

Focal, Mild

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 104

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-104

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 105

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-105

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 106

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Terminal Sacrifice

HISTO: MB204G-106

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 107

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-107

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 108

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-108

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 109

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-109

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

OBSERVATIONS

* Lung

Inflammation

Focal, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 110

TRT#: 11

SEX: Female

DAY ON TEST: 92

DOSE: 5000 PPM

DISP: Accidentally Killed

HISTO: MB204G-110

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

* Uterus

OBSERVATIONS

* Lung

Inflammation

Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 111

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-111

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Lung	Inflammation	Focal, Mild
--------	--------------	-------------

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 112

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-112

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Mammary Gland
* Peripheral Nerve
* Skin
* Stomach, Glandular
* Urinary Bladder

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Liver
* Ovary
* Pituitary Gland
* Spinal Cord
* Thymus
* Uterus

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Pancreas
* Salivary Glands
* Spleen
* Thyroid Gland

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Parathyroid Gland
* Skeletal Muscle
* Stomach, Forestomach
* Trachea

OBSERVATIONS

* Lung		Inflammation	Focal, Minimal
* Nose	Olfactory Epi	Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-113

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Parathyroid Gland	* Peripheral Nerve
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Heart		Inflammation	Focal, Minimal
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Pancreas	Acinus	Degeneration	Focal, Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 114

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-114

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Peripheral Nerve
* Pituitary Gland	* Salivary Glands	* Skeletal Muscle	* Skin
* Spinal Cord	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Heart		Inflammation	Focal, Minimal
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Lymph Node, Mandibular		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1 NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 115

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-115

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Peripheral Nerve | * Pituitary Gland | * Salivary Glands | * Skeletal Muscle |
| * Skin | * Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

- | | | | |
|--|------------|---------------------------|------|
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Mild |
| [Vacuolization Cytoplasmic TGLS = 3-8] | | | |
| * Ovary | Bilateral | Cyst | Mild |

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-116

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Parathyroid Gland
* Peripheral Nerve	* Pituitary Gland	* Salivary Glands	* Skeletal Muscle
* Skin	* Spinal Cord	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Pancreas	Acinus	Degeneration	Focal, Mild
* Thyroid Gland	Follicle	Cyst	Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Liver	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Pancreas	Acinus	Degeneration	Focal, Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-118

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Heart		Inflammation	Focal, Minimal
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-119

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Liver		Inflammation	Focal, Mild
	Hepatocyte	Vacuolization Cytoplasmic	Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

* PROTOCOL REQUIRED TISSUE

Experiment Number: 92013-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 4-Methylimidazole

CAS Number: 822-36-6

Date Report Requested: 10/21/2014

Time Report Requested: 04:14:26

First Dose M/F: NA / NA

Lab: MBA

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10000 PPM

DISP: Accidentally Killed

HISTO: MB204G-120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lung	* Lymph Node, Mesenteric	* Nose
* Ovary	* Parathyroid Gland	* Peripheral Nerve	* Pituitary Gland
* Salivary Glands	* Skeletal Muscle	* Skin	* Spinal Cord
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Mammary Gland

OBSERVATIONS

* Liver	Hepatocyte	Hepatodiaphragmatic Nodule Vacuolization Cytoplasmic	Minimal
	[Hepatodiaphragmatic Nodule TGLS = 3-8]		
* Lymph Node, Mandibular		Hemorrhage	Mild
* Pancreas	Acinus	Degeneration	Focal, Mild

PRIMARY CAUSE OF DEATH

-

Animal Note: CARCASS- THIN, TGL 1-NST

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE