

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

C Number:	C88070
Lock Date:	09/04/1992
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: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

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First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31846
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 2	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31847
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 3	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31848
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
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
OBSERVATIONS			
* Heart		Cardiomyopathy	Mild
* Liver			
Note: step sections: normal liver.			
Note: liver sections on sl 11 and 4 are normal microscopically. Ordered step sections6/9/92.			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 4	TRT#: 1	SEX: Male	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31849
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
* Larynx	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	Zymbal's Gland
MISSING			
* Lymph Node, Bronchial			
OBSERVATIONS			
* Heart		Cardiomyopathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 1-11]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 5	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31850
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			
OBSERVATIONS			
* Lung		Hemorrhage	Mild
[Hemorrhage TGLS = 1-3]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 6	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31851
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
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
OBSERVATIONS			
* Heart		Cardiomyopathy	Minimal
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 7	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31852
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Epididymis	Inflammation	Granulomatous, Mild
* Lung	Hemorrhage	Minimal
* Lym Node Media		

Note: no mediast. In on sl 2 or elsewhere; some hemorrhage in conn tissue adjacent to thymus.

PRIMARY CAUSE OF DEATH	-
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* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 8	TRT#: 1 DOSE: CONTROL	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31853
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 9	TRT#: 1	SEX: Male	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31854
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
* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
Tissue NOS	* Trachea	* Urinary Bladder	
MISSING			
* Lymph Node, Bronchial			
OBSERVATIONS			
* Heart		Cardiomyopathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 1-11]			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 10	TRT#: 1	SEX: Male	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31855
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	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			
OBSERVATIONS			
* Spleen		Accessory Spleen	
[Accessory Spleen TGLS = 1-11]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 201	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31946
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 202	TRT#: 3 DOSE: 500 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31947
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 203	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31948
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 204	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31949
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 205	TRT#: 3 DOSE: 500 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31950
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH -			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 206	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31951
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 207	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31952

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 208	TRT#: 3 DOSE: 500 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31953
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 209	TRT#: 3	SEX: Male	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31954
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 210	TRT#: 3 DOSE: 500 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31955
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 401	TRT#: 5	SEX: Male	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31926
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 402	TRT#: 5 DOSE: 1000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31927
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 403	TRT#: 5 DOSE: 1000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31928
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 404	TRT#: 5	SEX: Male	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31929

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 405	TRT#: 5 DOSE: 1000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31930
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 406	TRT#: 5 DOSE: 1000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31931
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 407	TRT#: 5	SEX: Male	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31932
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Liver	Nose		
OBSERVATIONS			
Liver			
Note: no microscopic lesion in liver on section 4 or 11.			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 408	TRT#: 5	SEX: Male	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31933

ORGAN AND ACCOUNTABLE SITE STATUS

MISSING

Lymph Node, Mediastinal

OBSERVATIONS

Lym Node Media

Note: rechecked wet tissue and block; no mediast. LN found.

Note: no med ln on sl 2; ordered more sections 6/27/92

Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
Spleen		Accessory Spleen	
[Accessory Spleen TGLS = 3-11]			

PRIMARY CAUSE OF DEATH	-
------------------------	---

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 409	TRT#: 5 DOSE: 1000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31934
OBSERVATIONS			
Liver	[Hepatodiaphragmatic Nodule TGLS = 1-11]		Hepatodiaphragmatic Nodule
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH		-	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 410	TRT#: 5	SEX: Male	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31935

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 601	TRT#: 7 DOSE: 2000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31906
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 602	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31907
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 603	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31908

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 604	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31909
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 605	TRT#: 7 DOSE: 2000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31910
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 606	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31911
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 607	TRT#: 7 DOSE: 2000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31912
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 608	TRT#: 7 DOSE: 2000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31913
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 609	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31914
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 610	TRT#: 7	SEX: Male	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31915
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 801	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31886
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 802	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31887
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 803	TRT#: 9	SEX: Male	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31888
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 804	TRT#: 9	SEX: Male	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31889
OBSERVATIONS			
Liver	Hepatodiaphragmatic Nodule		
[Hepatodiaphragmatic Nodule TGLS = 2-11]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 805	TRT#: 9	SEX: Male	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31890
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 806	TRT#: 9	SEX: Male	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31891
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 807	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31892
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 808	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31893
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 809	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31894
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 810	TRT#: 9 DOSE: 4000 PPM	SEX: Male DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31895
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 1001	TRT#: 11	SEX: Male	DAY ON TEST: 93
	DOSE: 8000 PPM	DISP: Terminal Sacrifice	HISTO: 31866
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	
MISSING			
* Lymph Node, Mediastinal			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
* Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1002

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31867

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
Lacrimal Gland	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Lung		Hemorrhage	Minimal
* Nose	Goblet Cell, Nasopharynx Dct	Hypertrophy	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1003

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31868

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

Coagulating Gland

* Epididymis

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Kidney

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Pituitary Gland

* Preputial Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

Tissue NOS

* Trachea

* Urinary Bladder

MISSING

* Parathyroid Gland

OBSERVATIONS

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 1004	TRT#: 11	SEX: Male	DAY ON TEST: 93
	DOSE: 8000 PPM	DISP: Terminal Sacrifice	HISTO: 31869
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	
MISSING			
* Lymph Node, Mandibular			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
* Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 1005	TRT#: 11	SEX: Male	DAY ON TEST: 93
	DOSE: 8000 PPM	DISP: Terminal Sacrifice	HISTO: 31870
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	
MISSING			
* Lymph Node, Mandibular			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
* Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
Note: median septum xs1.			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1006

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31871

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

* Larynx

* Liver

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Preputial Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

OBSERVATIONS

* Lung

Hemorrhage

Minimal

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

Note: teensy bit of goblet cell hypertrophy??

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1007

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Intestine Large, Cecum [Hyperplasia TGLS = 1-11]	Lymphoid Tiss	Hyperplasia	Lymphoid, Mild
* Lung		Hemorrhage	Minimal
* Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1008

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 1009

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

* Larynx

* Liver

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Pituitary Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

MISSING

* Parathyroid Gland

OBSERVATIONS

* Lung

Hemorrhage

Minimal

* Lymph Node, Mediastinal

Hemorrhage

Mild

[Hemorrhage TGLS = 1-2]

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

* Preputial Gland

Hyperplasia

Mild

Note: this isnt really hyperplasia, its apparently duplication of preputial glands, i.e., developmental anomaly, which isnt available.

[Hyperplasia TGLS = 2-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 1009	TRT#: 11	SEX: Male	DAY ON TEST: 93
	DOSE: 8000 PPM	DISP: Terminal Sacrifice	HISTO: 31874
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	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1010

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31875

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Preputial Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

MISSING

* Parathyroid Gland

* Pituitary Gland

OBSERVATIONS

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

* Pituitary Gland

Note: rechecked wet tissue; still no pituitary.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 101	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31856
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
* Larynx	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		
MISSING			
* Lymph Node, Bronchial			
OBSERVATIONS			
* Kidney	Renal Tubule	Mineralization	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 102	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31857
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	* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			
OBSERVATIONS			
* Liver	Hepatodiaphragmatic Nodule		
[Hepatodiaphragmatic Nodule TGLS = 2-11]			
* Lung	Hemorrhage		Minimal
* Ovary	Cyst		Mild
[Cyst TGLS = 1-7]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 103	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31858
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
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			
OBSERVATIONS			
* Kidney	Renal Tubule	Mineralization	Minimal
* Lung		Hemorrhage	Minimal
* Ovary		Cyst	Mild
[Cyst TGLS = 1-7]			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 104	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31859
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
* Larynx	* Liver	* Lung	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	
OBSERVATIONS			
* Kidney	Renal Tubule	Mineralization	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 105

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 93

HISTO: 31860

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Renal Tubule

Mineralization

Minimal

* Ovary

Cyst

Mild

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 106	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31861
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	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	
MISSING			
* Parathyroid Gland			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 38162

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Renal Tubule

Mineralization

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 108	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31863
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	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 109	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31864
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
* Larynx	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		
MISSING			
* Lymph Node, Bronchial			
OBSERVATIONS			
* Kidney	Renal Tubule	Mineralization	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 110	TRT#: 2	SEX: Female	DAY ON TEST: 93
	DOSE: CONTROL	DISP: Terminal Sacrifice	HISTO: 31865
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	* Larynx	* Liver	* Lymph Node, Bronchial
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		
MISSING			
* Parathyroid Gland			
OBSERVATIONS			
* Lung		Hemorrhage	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 301	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31956
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 302	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31957
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
OBSERVATIONS			
Thymus		Hemorrhage	Mild
[Hemorrhage TGLS = 1-2]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 303	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31958
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 304	TRT#: 4 DOSE: 500 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31959
OBSERVATIONS Nose Ovary [Cyst TGLS = 1-7]	Goblet Cell, Nasopharyn Dct	Hypertrophy Cyst	Minimal Mild
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 305	TRT#: 4 DOSE: 500 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31960
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 306	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31961
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 307	TRT#: 4 DOSE: 500 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31962
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH -			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 308	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31963
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 309	TRT#: 4 DOSE: 500 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31964
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH -			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 310	TRT#: 4	SEX: Female	DAY ON TEST: 93
	DOSE: 500 PPM	DISP: Terminal Sacrifice	HISTO: 31965

ORGAN AND ACCOUNTABLE SITE STATUS	
NORMAL	
Nose	
PRIMARY CAUSE OF DEATH	-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 501	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31936
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 502	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31937
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 503	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31938
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 504	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31939
OBSERVATIONS			
Mesentery [Necrosis TGLS = 1-11]	Fat	Necrosis	Mild
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 505	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31940
OBSERVATIONS			
Mesentery [Necrosis TGLS = 1-11]	Fat	Necrosis	Mild
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 506	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31941
OBSERVATIONS			
Liver	[Hepatodiaphragmatic Nodule TGLS = 1-11]		Hepatodiaphragmatic Nodule
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH		-	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 507	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31942
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 508	TRT#: 6 DOSE: 1000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31943
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH -			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 509	TRT#: 6	SEX: Female	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31944
OBSERVATIONS			
Liver	Serosa	Fibrosis	Mild
[Fibrosis TGLS = 1-11]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 510	TRT#: 6	SEX: Female	DAY ON TEST: 93
	DOSE: 1000 PPM	DISP: Terminal Sacrifice	HISTO: 31945

ORGAN AND ACCOUNTABLE SITE STATUS	
NORMAL	
Nose	
PRIMARY CAUSE OF DEATH	-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 701	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31916
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 702	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31917
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 703	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31918
OBSERVATIONS			
Mesentery [Necrosis TGLS = 1-11]	Fat	Necrosis	Moderate
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 704	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31919
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 705	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31920
OBSERVATIONS			
Liver	[Hepatodiaphragmatic Nodule TGLS = 1-11]		Hepatodiaphragmatic Nodule
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH		-	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 706	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31921
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 707	TRT#: 8	SEX: Female	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31922

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 708	TRT#: 8	SEX: Female	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31923
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
Ovary		Cyst	Minimal
[Cyst TGLS = 1-7]			
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 709	TRT#: 8 DOSE: 2000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31924
OBSERVATIONS Nose Ovary [Cyst TGLS = 1-7]	Goblet Cell, Nasopharyn Dct	Hypertrophy Cyst	Minimal Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 710	TRT#: 8	SEX: Female	DAY ON TEST: 93
	DOSE: 2000 PPM	DISP: Terminal Sacrifice	HISTO: 31925
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
OBSERVATIONS			
Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 1-11]			
PRIMARY CAUSE OF DEATH		-	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 901	TRT#: 10 DOSE: 4000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31896
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH -			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 902	TRT#: 10 DOSE: 4000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31897
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 903	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31898
OBSERVATIONS			
Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 1-11]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 904	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31899
OBSERVATIONS			
Mesentery		Fibrosis	Minimal
[Fibrosis TGLS = 1-11]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 905	TRT#: 10 DOSE: 4000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31900
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 906	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31901
ORGAN AND ACCOUNTABLE SITE STATUS			
NORMAL			
Nose			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Isobutene
CAS Number: 115-11-7

Date Report Requested: 10/15/2014
Time Report Requested: 23:09:38
First Dose M/F: NA / NA
Lab: BNW

ANIMAL ID: 907	TRT#: 10 DOSE: 4000 PPM	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 93 HISTO: 31902
OBSERVATIONS			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 908	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31903
OBSERVATIONS			
Liver		Fibrosis	Moderate
		Hepatodiaphragmatic Nodule	
[Fibrosis TGLS = 1-11]			
[Hepatodiaphragmatic Nodule TGLS = 1,2-11+12]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 909	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31904

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL
Nose
PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 910	TRT#: 10	SEX: Female	DAY ON TEST: 93
	DOSE: 4000 PPM	DISP: Terminal Sacrifice	HISTO: 31905
OBSERVATIONS			
Kidney		Atrophy	Marked
	Renal Tubule	Mineralization	Moderate
[Atrophy TGLS = 2-5]			
Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
Ovary		Cyst	Minimal
[Cyst TGLS = 1-7]			
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1101

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Larynx
* Lymph Node, Mediastinal
* Pancreas
* Skin
* Thymus
* Uterus

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Liver
* Lymph Node, Mesenteric
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lung
* Mammary Gland
* Pituitary Gland
* Stomach, Forestomach
* Trachea

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

* Kidney Renal Tubule
* Nose Goblet Cell, Nasopharynx

Mineralization
Hypertrophy

Mild
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1102

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31877

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Larynx
* Lymph Node, Mediastinal
* Pancreas
* Skin
* Thymus
* Uterus

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lung
* Lymph Node, Mesenteric
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Bronchial
* Mammary Gland
* Pituitary Gland
* Stomach, Forestomach
* Trachea

OBSERVATIONS

* Liver
[Hepatodiaphragmatic Nodule TGLS = 1-11]
* Nose
Goblet Cell, Nasopharyn Dct
Goblet Cell, Respirat Epith

Hepatodiaphragmatic Nodule
Hypertrophy
Hypertrophy
Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1103

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31878

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

* Larynx

* Liver

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Renal Tubule

Mineralization

Minimal

* Lung

Hemorrhage

Minimal

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1104

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31879

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Renal Tubule

Mineralization

Minimal

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1105

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31880

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1106

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31881

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Larynx
* Lymph Node, Mediastinal
* Pancreas
* Skin
* Thymus
* Uterus

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Liver
* Lymph Node, Mesenteric
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Bronchial
* Mammary Gland
* Pituitary Gland
* Stomach, Forestomach
* Trachea

OBSERVATIONS

* Lung
* Nose

Hemorrhage
Hypertrophy

Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1107

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31882

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

* Larynx

* Liver

Lymph Node

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Lung

Hemorrhage

Minimal

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1108

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31883

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

* Larynx

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Renal Tubule

Mineralization

Minimal

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-11]

* Lung

Hemorrhage

Minimal

* Nose

Goblet Cell, Nasopharyn Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

ANIMAL ID: 1109	TRT#: 12	SEX: Female	DAY ON TEST: 93
	DOSE: 8000 PPM	DISP: Terminal Sacrifice	HISTO: 31884
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	* Larynx	* Liver	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	
OBSERVATIONS			
* Nose	Goblet Cell, Nasopharyn Dct	Hypertrophy	Minimal
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 88070-01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:09:38

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1110

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 8000 PPM

DISP: Terminal Sacrifice

HISTO: 31885

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

* Larynx

* Liver

* Lung

* Lymph Node, Bronchial

* Lymph Node, Mandibular

* Lymph Node, Mediastinal

* Lymph Node, Mesenteric

* Mammary Gland

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Nose

Goblet Cell, Nasopharynx Dct

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE