

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:19  
**First Dose M/F:** NA / NA  
**Lab:** BNW

<b>C Number:</b>	C88070
<b>Lock Date:</b>	09/04/1992
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

Experiment Number: 88070-02

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Species/Strain: Mouse/B6C3F1

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First Dose M/F: NA / NA

Lab: BNW

<b>B6C3F1 Mouse Male CONTROL</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	M	+	+	+	+	+	M	8
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Heart	+	+	+	+	+	+	+	+	+	+	10
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**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	M	+	M	M	+	+	+	M	+	6

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 88070-02

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male CONTROL	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
<b>General Body System</b>											
NONE											
<b>Genital System</b>											
Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	I	9
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
<b>Hematopoietic System</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	M	+	+	+	+	+	+	9
Lymph Node, Mandibular	+	+	M	+	+	+	+	+	+	M	8
Lymph Node, Mediastinal	M	M	M	M	M	M	M	M	M	+	1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	M	M	+	+	+	+	+	8
<b>Integumentary System</b>											
Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

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First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male CONTROL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	
Skin		+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>												
Bone		+	+	+	+	+	+	+	+	+	+	10
<b>Nervous System</b>												
Brain		+	+	+	+	+	+	+	+	+	+	10
<b>Respiratory System</b>												
Larynx		+	I	+	+	+	+	+	+	+	+	9
Lung		+	+	+	+	+	+	+	+	+	+	10
Nose		+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	10
<b>Special Senses System</b>												
NONE												
<b>Urinary System</b>												
Kidney		+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10
<b>SYSTEMIC LESIONS</b>												
Multiple Organ		+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

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**Species/Strain:** Mouse/B6C3F1

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

**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Male**  
**500 PPM**

ANIMAL ID

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

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**Date Report Requested:** 10/15/2014  
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**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Male**  
**500 PPM**

ANIMAL ID

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ 0

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

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**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Mouse/B6C3F1

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

**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Male**

**1000 PPM**

ANIMAL ID

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

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Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

DAY ON TEST

**B6C3F1 Mouse Male**

**1000 PPM**

ANIMAL ID

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

0

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically



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**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
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**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Male**  
**2000 PPM**

ANIMAL ID

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Test Compound: Isobutene

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Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

DAY ON TEST

**B6C3F1 Mouse Male**

**2000 PPM**

ANIMAL ID

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

0

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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I ..Insufficient tissue

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**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

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

DAY ON TEST

**B6C3F1 Mouse Male**  
**4000 PPM**

ANIMAL ID

\*TOTALS

---

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

DAY ON TEST

**B6C3F1 Mouse Male**

**4000 PPM**

ANIMAL ID

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

0

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

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Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

<b>B6C3F1 Mouse Male</b> <b>8000 PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
		*TOTALS									

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Heart	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	M	M	+	+	+	+	+	+	+	8

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
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Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 115-11-7

First Dose M/F: NA / NA

Species/Strain: Mouse/B6C3F1

Lab: BNW

B6C3F1 Mouse Male 8000 PPM	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
<b>General Body System</b>											
NONE											
<b>Genital System</b>											
Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
<b>Hematopoietic System</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	+	+	+	M	M	+	8
Lymph Node, Mandibular	+	M	+	M	+	+	+	+	+	+	8
Lymph Node, Mediastinal	M	+	+	M	M	+	M	M	+	M	4
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>Integumentary System</b>											
Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

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CAS Number: 115-11-7

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Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male 8000 PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	ANIMAL ID	0	1	0	0	0	0	0	0	0	0	
Skin		+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>												
Bone		+	+	+	+	+	+	+	+	+	+	10
<b>Nervous System</b>												
Brain		+	+	+	+	+	+	+	+	+	+	10
<b>Respiratory System</b>												
Larynx		+	+	+	+	+	+	+	+	+	+	10
Lung		+	+	+	+	+	+	+	+	+	+	10
Nose		+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	10
<b>Special Senses System</b>												
NONE												
<b>Urinary System</b>												
Kidney		+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10
<b>SYSTEMIC LESIONS</b>												
Multiple Organ		+	+	+	+	+	+	+	+	+	+	10

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

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M ..Missing tissue

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CAS Number: 115-11-7

First Dose M/F: NA / NA

Species/Strain: Mouse/B6C3F1

Lab: BNW

B6C3F1 Mouse Female CONTROL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1	1	1	1		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	M	+	9

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue



Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Female CONTROL	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	4	4	4	4	4	4	4	4	4	4	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
<b>General Body System</b>											
NONE											
<b>Genital System</b>											
Clitoral Gland	+	M	+	+	+	+	+	+	+	+	9
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
<b>Hematopoietic System</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	M	+	+	+	+	+	+	+	M	8
Lymph Node, Mandibular	+	+	+	+	M	+	+	+	+	+	9
Lymph Node, Mediastinal	M	+	+	+	M	M	M	+	M	M	4
Lymph Node, Mesenteric	+	+	+	+	M	+	M	+	+	+	8
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>Integumentary System</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>											

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Female CONTROL	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>Nervous System</b>											
Brain	+	+	+	+	+	+	+	+	+	+	10
<b>Respiratory System</b>											
Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
<b>Special Senses System</b>											
NONE											
<b>Urinary System</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
<b>SYSTEMIC LESIONS</b>											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**500 PPM**

ANIMAL ID

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**500 PPM**

ANIMAL ID

\*TOTALS

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ 0

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**1000 PPM**

ANIMAL ID

\*TOTALS

---

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**1000 PPM**

ANIMAL ID

\*TOTALS

---

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ 0

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

<b>B6C3F1 Mouse Female</b> <b>2000 PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0		
	7	7	7	7	7	7	7	7	7	7		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		

**Alimentary System**

Liver + + 2

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Ovary + 1

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

<b>B6C3F1 Mouse Female</b> <b>2000 PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	*TOTALS
	0	0	0	0	0	0	0	0	0	0		
	7	7	7	7	7	7	7	7	7	7		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

+ + + 3

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically



**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**4000 PPM**

ANIMAL ID

\*TOTALS

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

NONE

**Hematopoietic System**

NONE

**Integumentary System**

NONE

**Musculoskeletal System**

NONE

**Nervous System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

**Experiment Number:** 88070-02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Mouse/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

**Test Compound:** Isobutene  
**CAS Number:** 115-11-7

**Date Report Requested:** 10/15/2014  
**Time Report Requested:** 23:13:20  
**First Dose M/F:** NA / NA  
**Lab:** BNW

DAY ON TEST

**B6C3F1 Mouse Female**  
**4000 PPM**

ANIMAL ID

\*TOTALS

---

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ 0

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
<b>B6C3F1 Mouse Female</b> <b>8000 PPM</b>		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
*TOTALS											

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

**Cardiovascular System**

Heart	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	M	+	+	M	+	+	+	8

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Female 8000 PPM	DAY ON TEST										*TOTALS
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
Pituitary Gland	+	+	M	+	+	+	+	+	+	+	9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
<b>General Body System</b>											
NONE											
<b>Genital System</b>											
Clitoral Gland	+	+	+	+	+	+	+	M	+	+	9
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
<b>Hematopoietic System</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	+	+	+	+	M	+	9
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mediastinal	M	M	M	+	M	M	M	M	+	M	2
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>Integumentary System</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>											

\* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue

M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically

Experiment Number: 88070-02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Isobutene

CAS Number: 115-11-7

Date Report Requested: 10/15/2014

Time Report Requested: 23:13:20

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Female 8000 PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	*TOTALS
	ANIMAL ID	0	1	1	1	1	1	1	1	1	1	
Bone		0	0	0	0	0	0	0	0	0	0	10
<b>Nervous System</b>		4	4	4	4	4	4	4	4	4	4	
Brain		0	0	0	0	0	0	0	0	0	0	10
<b>Respiratory System</b>		1	1	1	1	1	1	1	1	1	1	
Larynx		0	0	0	0	0	0	0	0	0	1	10
Lung		1	2	3	4	5	6	7	8	9	0	10
Nose		+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	10
<b>Special Senses System</b>												
NONE												
<b>Urinary System</b>												
Kidney		+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10
<b>SYSTEMIC LESIONS</b>												
Multiple Organ		+	+	+	+	+	+	+	+	+	+	10

\*\* END OF REPORT \*\*

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically