

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:47

First Dose M/F: NA / NA

Lab: BNW

C Number: C02200B

Lock Date: 05/26/1992

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

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Lab: BNW

B6C3F1 Mouse Male
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
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	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

*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	I	+	+	+	+	+	M	8
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

Blood Vessel	+	+	+	+	+	+	+	+	M	+	9
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy						1			1	1.0	

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Hypertrophy						1			1	1.0	

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X ..Lesion present

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1) Minimal 3) Moderate

2) Mild 4) Marked

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**B6C3F1 Mouse Male
CONTROL**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
	1	2	3	4	5	6	7	8	9	0

***TOTALS**

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	M	M	M	+	M	M	M	+	+	+	4
Pituitary Gland	+	+	+	+	+	+	+	+	M	+	9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	M	M	M	+	M	+	M	M	4
Lymph Node, Mandibular	+	M	+	M	+	+	+	+	M	+	7
Lymph Node, Mediastinal	M	M	M	+	+	+	M	+	M	+	5
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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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
ANIMAL ID	3	3	3	3	3	3	3	3	3	3
	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

*TOTALS

Integumentary System

Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

Musculoskeletal System

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

Nervous System

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

Respiratory System

Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage											
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

1 1.0

Special Senses System

NONE

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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Lab: BNW

**B6C3F1 Mouse Male
62.5 PPM**

DAY ON TEST										
	0	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	9
3	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
2	2	2	2	2	2	2	2	2	2	2
0	0	0	0	0	0	0	0	0	0	1
1	2	3	4	5	6	7	8	9	0	

*TOTALS

Alimentary System

Liver		+								1
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	10
Epithelium, Hyperplasia	1	2		1	2	2	2	2		7 1.7
Inflammation, Suppurative						1				1 1.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Spleen		+			1
Pigmentation, Melanin		2		1	2.0

Integumentary System

NONE

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Lab: BNW

**B6C3F1 Mouse Male
62.5 PPM**

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
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung

 + + + + + + + + + + 10

Bronchiole, Degeneration

 1 1 1 1 1 1 1 1 1 1 10 1.0

Nose

 + + + + + + + + + + 10

Olfactory Epi, Degeneration

 2 2 3 2 3 2 2 3 2 3 10 2.4

Olfactory Epi, Metaplasia

 2 2 3 2 2 2 2 2 2 2 10 2.1

Special Senses System

NONE

Urinary System

NONE

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First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male
125 PPM

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
ANIMAL ID	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4
	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	+	+	+	M	+	+	M	+	+	+	8
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	M	+	+	+	+	+	+	+	+	9
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage, Focal	1										1 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Epithelium, Hyperplasia	1	3	3	3	3	1	3	2			7 2.3
Ulcer						2					1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy					1						1 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

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Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:48

First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
125 PPM**

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
ANIMAL ID	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

TOTALS*Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	M	M	+	+	+	+	+	M	7
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	M	M	+	M	M	M	M	M	3
Lymph Node, Mandibular	+	+	+	+	+	+	+	M	+	+	9
Lymph Node, Mediastinal	M	M	+	+	+	+	M	M	+	M	5
Lymph Node, Mesenteric	+	I	+	+	+	+	+	+	+	+	9

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
125 PPM**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

***TOTALS**

Lymph Node, Mesenteric	+	I	+	+	+	+	+	+	+	+	9
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

Mammary Gland	M	I	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

Musculoskeletal System

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

Nervous System

Brain	+	+	+	+	+	+	+	+	+	+	10
Granuloma							2		1	2.0	

Respiratory System

Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Bronchiole, Degeneration	1	1	1	1	1	1	1	1	1	1	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epi, Degeneration	2	3	3	3	3	3	3	3	3	3	10
Olfactory Epi, Inflammation, Suppurative	1	2	2	1	1		1	1		7	1.3
Olfactory Epi, Metaplasia	2	3	3	3	3	3	3	3	3	3	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

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Lab: BNW

**B6C3F1 Mouse Male
125 PPM**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

*TOTALS

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Urinary Bladder

+ M + + + + + + + + 9

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Date Report Requested: 10/18/2014

Time Report Requested: 15:27:48

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male
250 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 9 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 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 | + | + | + | A | + | + | + | + | A | + | 8 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | A | + | + | + | + | A | + | 8 |
| Intestine Small, Ileum | + | + | + | A | + | + | + | + | + | + | 9 |
| Intestine Small, Jejunum | + | + | + | A | + | + | + | + | + | + | 9 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Centrilobular, Cytomegaly | | | | | 2 | 2 | | | 2 | 2.0 | |
| Centrilobular, Necrosis | 4 | 4 | 4 | 4 | 4 | | 4 | | 6 | 4.0 | |
| Mineralization | 2 | | | | 2 | 2 | 2 | | 4 | 2.0 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 2 | | | | 2 | | | 2 | 2.0 | | |
| Ulcer | | | | | | 2 | | | 1 | 2.0 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | 1 | 1 | 1 | 1 | | | | 4 | 1.0 | | |
| Muscularis, Mineralization | | | | | 1 | 2 | 1 | | 3 | 1.3 | |

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:48

First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 9 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

***TOTALS**

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Blood Vessel | + | + | M | + | + | + | + | + | + | + | 9 |
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
| Hemorrhage | | | 1 | | | 1 | | | 1 | | 3 1.0 |
| Mineralization | | | 2 | | | | 3 | | 1 | | 3 2.0 |

Endocrine System

| | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | M | M | M | M | + | M | + | + | M | + | 4 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | 10 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Prostate | + | + | + | + | + | + | + | + | + | + | 10 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | 10 |
| Testes | + | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | | | 1 | | | | 1 | | | 2 | 1.0 |

Hematopoietic System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:48

First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 9 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

TOTALS*Hematopoietic System**

| | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|-----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Bronchial | + | + | + | + | + | + | M | M | M | M | + |
| Lymph Node, Mandibular | + | + | + | I | + | + | + | + | + | + | 9 |
| Lymph Node, Mediastinal | + | + | M | M | + | + | M | M | M | M | + |
| Lymph Node, Mesenteric | M | + | + | + | + | + | + | + | + | + | 9 |
| Necrosis | | 2 | 2 | 2 | | 2 | | | | 4 | 2.0 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |
| Necrosis | | 3 | 3 | 1 | 3 | 3 | | 2 | | 6 | 2.5 |

Integumentary System

| | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | 0 |
| Skin | + | + | + | + | + | + | + | + | + | + | 10 |

Musculoskeletal System

| | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

| | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

Respiratory System

| | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | 10 |
| Lung | + | + | + | + | + | + | + | + | + | + | 10 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/18/2014

Test Type: 90-DAY

Test Compound: Styrene

Time Report Requested: 15:27:48

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 100-42-5

Species/Strain: Mouse/B6C3F1

First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 9 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

***TOTALS**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-----|-------|
| Bronchiole, Degeneration | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 1.2 |
| Inflammation | | 2 | 1 | 2 | 2 | 2 | | | | 2 | | 6 1.8 |
| Nose | + | + | + | + | + | + | + | + | + | + | 10 | |
| Nasolacrim Dct, Inflammation, Suppurative | | | 1 | 2 | | | | | | 2 | 1.5 | |
| Olfactory Epi, Degeneration | 3 | | | | | 2 | 3 | | 3 | | 4 | 2.8 |
| Olfactory Epi, Inflammation, Suppurative | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 8 | 1.0 |
| Olfactory Epi, Metaplasia | 2 | | | | | | 1 | | 1 | | 3 | 1.3 |
| Olfactory Epi, Necrosis | | 2 | 2 | 2 | 2 | 3 | | 2 | | | 6 | 2.2 |
| Trachea | + | + | + | + | + | + | + | + | + | + | 10 | |

Special Senses System

NONE

Urinary System

| | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | 10 |
| Cortex, Renal Tubule, Mineralization | 1 | | | | | | | 1 | | | 2 1.0 |
| Cortex, Renal Tubule, Necrosis | 4 | 1 | 2 | 2 | 2 | | | 3 | | | 6 2.3 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:48

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male
500 PPM

| 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 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 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 | + | + | M | + | + | + | + | + | + | + | 9 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Basophilic Focus | | | | | | | | X | | | 1 |
| Centrilobular, Cytomegaly | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 10 3.0 |
| Centrilobular, Inflammation | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | | 9 1.9 |
| Centrilobular, Karyomegaly | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 10 3.0 |
| Centrilobular, Necrosis | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | | 10 2.1 |
| Mineralization | | | | | 1 | 1 | | 1 | | 3 | 1.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 1 | 2 | 2 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 10 1.7 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | | 1 | 1 | | | | | | | 2 | 1.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

**B6C3F1 Mouse Male
500 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

***TOTALS**

Muscularis, Mineralization

1 1 2 1.0

Cardiovascular System

Blood Vessel

+ + + + + + + + + + 10

Heart

+ + + + + + + + + + 10

Mineralization

1 1 3 1.0

Endocrine System

Adrenal Cortex

+ + + + + + + + + + 10

Adrenal Medulla

+ + + + + + + + + + 10

Islets, Pancreatic

+ + + + + + + + + + 10

Parathyroid Gland

M + M + M + + M M M 5

Pituitary Gland

+ + + + + + M + + + 9

Thyroid Gland

+ + + + + + + + + + 10

General Body System

NONE

Genital System

Epididymis

+ + + + + + + + + + 10

Preputial Gland

+ + + + + + + + + + 10

Prostate

+ + + + + + + + + + 10

Seminal Vesicle

+ + + + + + + + + + 10

Testes

+ + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male
500 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

TOTALS*Hematopoietic System**

| | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Bronchial | + | M | + | + | M | + | + | + | + | + | 8 |
| Lymph Node, Mandibular | + | + | + | + | + | M | + | + | + | M | 8 |
| Lymph Node, Mediastinal | M | M | I | M | + | M | M | I | + | M | 2 |
| Lymph Node, Mesenteric | + | M | + | + | + | + | + | + | + | + | 9 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |

Integumentary System

| | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | 0 |
| Skin | + | + | + | + | + | + | + | I | + | + | 9 |

Musculoskeletal System

| | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

| | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

Respiratory System

| | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Larynx | + | + | + | + | + | + | + | + | + | + | 10 |
| Metaplasia, Squamous | | | | | | 1 | 1 | | 1 | | 3 1.0 |
| Lung | + | + | + | + | + | + | + | + | + | + | 10 |
| Bronchiole, Degeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse Male
500 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

***TOTALS**

| | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|----|-----|
| Inflammation | | | | | | | | | | 1 | 1 | 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | 10 | |
| Nasopharyn Dct, Cytoplasmic Alteration | 2 | | | | | | | | | | 1 | 2.0 |
| Olfactory Epi, Degeneration | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 10 | 2.6 |
| Olfactory Epi, Inflammation, Suppurative | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 10 | 1.5 |
| Olfactory Epi, Metaplasia | | | | | | 1 | 1 | 1 | 2 | | 4 | 1.3 |
| Olfactory Epi, Metaplasia, Squamous | | | | | | 1 | | | | | 1 | 1.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | 10 | |

Special Senses System

NONE

Urinary System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|-----|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | 10 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10 |
| Dilatation | | | | | | 3 | | | 1 | 3.0 | |

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

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

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 |
| | | 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 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | M | + | 9 |
| Gallbladder | + | + | M | M | + | + | + | + | + | + | 8 |
| 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 |
| Duct, Cyst | | | | | | | | | X | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |

Cardiovascular System

| | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |

Endocrine System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

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 | 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 | *TOTALS | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | | M | + | M | + | M | + | M | M | + | 4 |
| Pituitary Gland | | + | + | + | + | + | + | + | M | + | 9 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

Clitoral Gland

+ + + + + + + + M + 9

Ovary

+ + + + + + + + + + 10

Uterus

+ + + + + + + + + + 10

Hematopoietic System

Bone Marrow

+ + + + + + + + + + 10

Lymph Node, Bronchial

+ + M + + + + + + + 9

Lymph Node, Mandibular

+ + + + + + + + M + + 9

Lymph Node, Mediastinal

M M + M M M + M M M 2

Lymph Node, Mesenteric

+ + + + + + + + + + 10

Spleen

+ + + + + + + + + + 10

Thymus

+ + + + + + + + + + 10

Integumentary System

Mammary Gland

+ + + + + + + + + + 10

Skin

+ + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

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 |
| | | 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 |

*TOTALS

| | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|----|
| Skin | + | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|---|----|

Musculoskeletal System

| | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

| | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|---|----|

Respiratory System

| | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | 10 |
|--------|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|----|
| Nose | + | + | + | + | + | + | + | + | + | + | + | 10 |
|------|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|----|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | 10 |
|---------|---|---|---|---|---|---|---|---|---|---|---|----|

Special Senses System

NONE

Urinary System

| | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | 10 |
|--------|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | 10 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

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

Alimentary System

| | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|-----|---|---|---|---|-------|
| Liver | | + | | 1 | | | | | | | |
| Hemorrhage, Focal | | | 1 | | 1 | 1.0 | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 1 | 2 | 2 | | 2 | 3 | 3 | 2 | | | 7 2.1 |
| Ulcer | | | | | 3 | 2 | | | | 2 | 2.5 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Muscularis, Mineralization | | | 1 | | | | 1 | | | 2 | 1.0 |

Cardiovascular System

NONE

Endocrine System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Degeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

NONE

Hematopoietic System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
62.5 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTALS | | | | | | | | | | |

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Lung

 + + + + + + + + + + 10

Bronchiole, Degeneration

 1 1 1 1 1 1 1 1 1 1 10 1.0

Nose

 + + + + + + + + + + 10

Olfactory Epi, Degeneration

 2 2 3 2 3 3 2 2 2 2 10 2.3

Olfactory Epi, Metaplasia

 2 2 3 2 3 3 2 2 2 2 10 2.3

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
125 PPM | 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 | | | | | | | | | |
| | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| ANIMAL ID | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| | | 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | |
| | | 0 0 0 0 0 0 0 0 0 1 | | | | | | | | | |
| | | 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | |
| | | *TOTALS | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 3 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 2 | 2 | 10 2.2 |
| Ulcer | | | | | 1 | | 1 | | 2 | | 3 1.3 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Muscularis, Mineralization | 1 | | | | 1 | | 1 | | | | 3 1.0 |

Cardiovascular System

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

Endocrine System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Degeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.0 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
125 PPM | 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 | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Larynx

+ + + + + + + + + + 10

Lung

+ + + + + + + + + + 10

Arteriole, Hypertrophy

1 2 2 1 4 1.5

Arteriole, Inflammation

1 1 1 1 2 1 5 1.2

Bronchiole, Degeneration

1 1 1 1 1 1 1 1 1 10 1.0

Nose

+ + + + + + + + + + 10

Olfactory Epi, Degeneration

3 3 3 3 3 3 2 3 3 3 10 2.9

Olfactory Epi, Metaplasia

3 3 3 3 3 3 2 3 3 2 10 2.8

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
250 PPM | 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 | | | | | | | | | |
| | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| ANIMAL ID | | 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 | | | | | | | | | |
| | | *TOTALS | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Centrilobular, Cytomegaly | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 1.2 |
| Centrilobular, Inflammation | | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | | 8 1.8 |
| Centrilobular, Karyomegaly | | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 7 1.1 |
| Centrilobular, Necrosis | | | | 2 | 1 | 1 | | | | | 3 1.3 |
| Mineralization | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | | 9 1.8 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 2 | 3 | 3 | 2 | 3 | 2 | 4 | 2 | 3 | 3 | 10 2.7 |
| Ulcer | | | | 2 | | | 2 | 1 | 2 | | 4 1.8 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | | | | | | 2 | | | | | 1 2.0 |
| Muscularis, Mineralization | 2 | 2 | | | 2 | | | | | | 3 2.0 |

Cardiovascular System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | | | | | 2 | | | 1 | 1 | | 3 1.3 |

Endocrine System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Degeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
250 PPM | DAY ON TEST | 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 | |
| | | 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 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | *TOTALS | | | | | | | | | |

NONE

Genital System

Ovary

+

1

Cyst

X

1

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

Larynx

+ + + + + + + + + + 10

Metaplasia, Squamous

1 1 1 1 1 1 1 1 1 1 4 1.0

Lung

+ + + + + + + + + + 10

Arteriole, Hypertrophy

2 2 2 2 2 2 2 2 2 2 2.0

Arteriole, Inflammation

2 2 2 2 2 2 2 2 2 2 2.0

Bronchiole, Degeneration

1 1 1 1 1 1 1 1 1 1 10 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
250 PPM | DAY ON TEST | 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 | |
| | | 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 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | *TOTALS | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | 10 |
| Olfactory Epi, Degeneration | | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 |
| Olfactory Epi, Inflammation, Suppurative | | 1 | | 1 | 2 | 1 | | 1 | | | 5 |
| Olfactory Epi, Metaplasia | | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| | | | | | | | | | | | 10 |
| | | | | | | | | | | | 1.0 |

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:49

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
500 PPM | 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 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 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 |
| Centrilobular, Cytomegaly | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 10 2.4 |
| Centrilobular, Inflammation | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 10 1.8 |
| Centrilobular, Karyomegaly | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 10 2.1 |
| Centrilobular, Necrosis | 1 | 1 | | 1 | 1 | 1 | | 2 | | | 6 1.2 |
| Mineralization | | | | | 1 | | | | 1 | | 2 1.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperplasia | 3 | 1 | 3 | | 2 | 2 | 2 | 3 | | | 7 2.3 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |

Cardiovascular System

| | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | M | + | + | 9 |
|--------------|---|---|---|---|---|---|---|---|---|---|---|

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

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1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 02200-04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Styrene

CAS Number: 100-42-5

Date Report Requested: 10/18/2014

Time Report Requested: 15:27:50

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
500 PPM | DAY ON TEST | 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 | |
| | | 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 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | *TOTALS | | | | | | | | | |
| Heart | | + | + | + | + | + | + | + | + | + | 10 |
| Mineralization | | | 1 | | | | | | | | 1 1.0 |
| Endocrine System | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | 10 |
| Degeneration | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | | M | + | + | M | + | + | M | + | + | 7 |
| Pituitary Gland | | + | + | + | + | + | M | + | + | + | 9 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | 10 |
| General Body System | | | | | | | | | | | |
| NONE | | | | | | | | | | | |
| Genital System | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | 10 |
| Ovary | | + | + | + | + | + | + | + | + | + | 10 |
| Uterus | | + | + | + | + | + | + | + | + | + | 10 |
| Hematopoietic System | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Bronchial | | + | + | + | M | + | + | + | M | + | 8 |
| Lymph Node, Mandibular | | + | + | M | + | + | + | + | M | + | 8 |
| Lymph Node, Mediastinal | | + | M | M | M | M | + | M | M | M | 2 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

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- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 02200-04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/18/2014

Test Type: 90-DAY

Test Compound: Styrene

Time Report Requested: 15:27:50

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 100-42-5

Species/Strain: Mouse/B6C3F1

First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
500 PPM | 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 |
| | | 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 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

| | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|--------|
| Lymph Node, Mediastinal | + | M | M | M | M | + | M | M | M | M | 2 |
| Lymph Node, Mesenteric | + | M | + | + | + | + | + | + | + | + | 9 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |
| Integumentary System | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin | + | + | + | + | + | + | + | + | + | + | 10 |
| Musculoskeletal System | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
| Nervous System | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
| Respiratory System | | | | | | | | | | | |
| Larynx | + | + | + | + | + | + | + | + | + | + | 10 |
| Metaplasia, Squamous | 1 | | 1 | | 1 | | 1 | | 1 | | 5 1.0 |
| Lung | + | + | + | + | + | + | + | + | + | + | 10 |
| Bronchiole, Degeneration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 10 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | 10 |
| Olfactory Epi, Degeneration | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | | 10 2.8 |
| Olfactory Epi, Inflammation, Suppurative | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | | 9 1.9 |
| Olfactory Epi, Metaplasia | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 10 1.7 |
| Olfactory Epi, Metaplasia, Squamous | 1 | | | | | | | | | | 1 1.0 |

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Species/Strain: Mouse/B6C3F1

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First Dose M/F: NA / NA

Lab: BNW

| B6C3F1 Mouse Female
500 PPM | DAY ON TEST | | | | | | | | | | |
|--------------------------------|-------------|-----------------|---|---|---|---|---|---|---|---|----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 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 | 9 |
| | 4 | 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 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 |
| | *TOTALS | | | | | | | | | | |
| Trachea | | + | + | + | + | + | + | + | + | + | 10 |
| Special Senses System | | NONE | | | | | | | | | |
| Urinary System | | Kidney | + | + | + | + | + | + | + | + | 10 |
| | | Urinary Bladder | + | + | + | + | + | + | + | + | 10 |

** END OF REPORT **

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