

**Experiment Number:** 02200-04

**Test Type:** 90-DAY

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Mouse/B6C3F1

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]**

**Test Compound:** Styrene

**CAS Number:** 100-42-5

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 15:25:24

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

**Lab:** BNW

<b>C Number:</b>	C02200B
<b>Lock Date:</b>	05/26/1992
<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

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First Dose M/F: NA / NA

Lab: BNW

B6C3F1 Mouse MALE	CONTROL	62.5 PPM	125 PPM	250 PPM	500 PPM
<b>Disposition Summary</b>					
Animals Initially In Study	10	10	10	10	10
Early Deaths					
Moribund Sacrifice				1	
Natural Death				5	
Survivors					
Terminal Sacrifice	10	10	10	4	10
Animals Examined Microscopically	10	10	10	10	10

ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(10)	(10)	(10)
Gallbladder	(8)	(0)	(8)	(8)	(10)
Intestine Large, Cecum	(10)	(0)	(10)	(10)	(10)
Intestine Large, Colon	(10)	(0)	(9)	(10)	(10)
Intestine Large, Rectum	(10)	(0)	(10)	(10)	(9)
Intestine Small, Duodenum	(10)	(0)	(10)	(8)	(10)
Intestine Small, Ileum	(10)	(0)	(10)	(9)	(10)
Intestine Small, Jejunum	(10)	(0)	(10)	(9)	(10)
Liver	(10)	(1)	(10)	(10)	(10)
Basophilic Focus					1
Centrilobular, Cytomegaly				2 [2.0]	10 [3.0]
Centrilobular, Inflammation					9 [1.9]
Centrilobular, Karyomegaly					10 [3.0]
Centrilobular, Necrosis				6 [4.0]	10 [2.1]
Hemorrhage, Focal			1 [1.0]		
Mineralization				4 [2.0]	3 [1.0]
Pancreas	(10)	(0)	(10)	(10)	(10)
Salivary Glands	(10)	(0)	(10)	(10)	(10)
Stomach, Forestomach	(10)	(10)	(10)	(10)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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B6C3F1 Mouse MALE	CONTROL	62.5 PPM	125 PPM	250 PPM	500 PPM
Epithelium, Hyperplasia		7 [1.7]	7 [2.3]	2 [2.0]	10 [1.7]
Inflammation, Suppurative		1 [1.0]			
Ulcer			1 [2.0]	1 [2.0]	
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)
Mineralization				4 [1.0]	2 [1.0]
Muscularis, Mineralization				3 [1.3]	2 [1.0]
CARDIOVASCULAR SYSTEM					
Blood Vessel	(9)	(0)	(10)	(9)	(10)
Heart	(10)	(0)	(10)	(10)	(10)
Cardiomyopathy	1 [1.0]		1 [1.0]		
Hemorrhage				3 [1.0]	
Mineralization				3 [2.0]	3 [1.0]
ENDOCRINE SYSTEM					
Adrenal Cortex	(10)	(0)	(10)	(10)	(10)
Hypertrophy	1 [1.0]				
Adrenal Medulla	(10)	(0)	(10)	(10)	(10)
Islets, Pancreatic	(10)	(0)	(10)	(10)	(10)
Parathyroid Gland	(4)	(0)	(7)	(4)	(5)
Pituitary Gland	(9)	(0)	(10)	(10)	(9)
Thyroid Gland	(10)	(0)	(10)	(10)	(10)
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Epididymis	(10)	(0)	(10)	(10)	(10)
Preputial Gland	(10)	(0)	(10)	(10)	(10)
Prostate	(10)	(0)	(10)	(10)	(10)
Seminal Vesicle	(10)	(0)	(10)	(10)	(10)

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B6C3F1 Mouse MALE	CONTROL	62.5 PPM	125 PPM	250 PPM	500 PPM
Testes	(10)	(0)	(10)	(10)	(10)
Mineralization				2 [1.0]	
<b>HEMATOPOIETIC SYSTEM</b>					
Bone Marrow	(10)	(0)	(10)	(10)	(10)
Lymph Node, Bronchial	(4)	(0)	(3)	(6)	(8)
Lymph Node, Mandibular	(7)	(0)	(9)	(9)	(8)
Lymph Node, Mediastinal	(5)	(0)	(5)	(5)	(2)
Lymph Node, Mesenteric	(10)	(0)	(9)	(9)	(9)
Necrosis				4 [2.0]	
Spleen	(10)	(1)	(10)	(10)	(10)
Pigmentation, Melanin		1 [2.0]			
Thymus	(10)	(0)	(10)	(10)	(10)
Necrosis				6 [2.5]	
<b>INTEGUMENTARY SYSTEM</b>					
Skin	(10)	(0)	(10)	(10)	(9)
<b>MUSCULOSKELETAL SYSTEM</b>					
Bone	(10)	(0)	(10)	(10)	(10)
<b>NERVOUS SYSTEM</b>					
Brain	(10)	(0)	(10)	(10)	(10)
Granuloma			1 [2.0]		
<b>RESPIRATORY SYSTEM</b>					
Larynx	(10)	(0)	(10)	(10)	(10)
Metaplasia, Squamous					3 [1.0]
Lung	(10)	(10)	(10)	(10)	(10)
Bronchiole, Degeneration		10 [1.0]	10 [1.0]	10 [1.2]	10 [1.0]
Hemorrhage	1 [1.0]				
Inflammation				6 [1.8]	1 [1.0]

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First Dose M/F: NA / NA

Lab: BNW

<b>B6C3F1 Mouse MALE</b>	<b>CONTROL</b>	<b>62.5 PPM</b>	<b>125 PPM</b>	<b>250 PPM</b>	<b>500 PPM</b>
Nose	(10)	(10)	(10)	(10)	(10)
Nasolacrim Dct, Inflammation, Suppurative				2 [1.5]	
Nasopharyn Dct, Cytoplasmic Alteration					1 [2.0]
Olfactory Epi, Degeneration		10 [2.4]	10 [2.9]	4 [2.8]	10 [2.6]
Olfactory Epi, Inflammation, Suppurative			7 [1.3]	8 [1.0]	10 [1.5]
Olfactory Epi, Metaplasia		10 [2.1]	10 [2.9]	3 [1.3]	4 [1.3]
Olfactory Epi, Metaplasia, Squamous					1 [1.0]
Olfactory Epi, Necrosis				6 [2.2]	
Trachea	(10)	(0)	(10)	(10)	(10)
<b>SPECIAL SENSES SYSTEM</b>					
None					
<b>URINARY SYSTEM</b>					
Kidney	(10)	(0)	(10)	(10)	(10)
Cortex, Renal Tubule, Mineralization				2 [1.0]	
Cortex, Renal Tubule, Necrosis				6 [2.3]	
Urinary Bladder	(10)	(0)	(9)	(10)	(10)
Dilatation					1 [3.0]

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

a - Number of animals examined microscopically at site and number of animals with lesion

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B6C3F1 Mouse FEMALE	CONTROL	62.5 PPM	125 PPM	250 PPM	500 PPM
<b>Disposition Summary</b>					
Animals Initially In Study	10	10	10	10	10
Early Deaths					
Survivors					
Terminal Sacrifice	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>					
Esophagus	(9)	(0)	(0)	(0)	(10)
Gallbladder	(8)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(10)
Liver	(10)	(1)	(10)	(10)	(10)
Centrilobular, Cytomegaly				9 [1.2]	10 [2.4]
Centrilobular, Inflammation				8 [1.8]	10 [1.8]
Centrilobular, Karyomegaly				7 [1.1]	10 [2.1]
Centrilobular, Necrosis				3 [1.3]	6 [1.2]
Hemorrhage, Focal		1 [1.0]			
Mineralization				9 [1.8]	2 [1.0]
Pancreas	(10)	(0)	(0)	(0)	(10)
Duct, Cyst	1				
Salivary Glands	(10)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(10)	(10)	(10)	(10)
Epithelium, Hyperplasia		7 [2.1]	10 [2.2]	10 [2.7]	7 [2.3]
Ulcer		2 [2.5]	3 [1.3]	4 [1.8]	

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<b>B6C3F1 Mouse FEMALE</b>	<b>CONTROL</b>	<b>62.5 PPM</b>	<b>125 PPM</b>	<b>250 PPM</b>	<b>500 PPM</b>
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)
Mineralization				1 [2.0]	
Muscularis, Mineralization		2 [1.0]	3 [1.0]	3 [2.0]	
<b>CARDIOVASCULAR SYSTEM</b>					
Blood Vessel	(10)	(0)	(0)	(0)	(9)
Heart	(10)	(0)	(10)	(10)	(10)
Mineralization				3 [1.3]	1 [1.0]
<b>ENDOCRINE SYSTEM</b>					
Adrenal Cortex	(10)	(10)	(10)	(10)	(10)
Degeneration		10 [1.0]	9 [1.0]	10 [1.0]	10 [1.0]
Adrenal Medulla	(10)	(10)	(10)	(10)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(10)
Parathyroid Gland	(4)	(0)	(0)	(0)	(7)
Pituitary Gland	(9)	(0)	(0)	(0)	(9)
Thyroid Gland	(10)	(0)	(0)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>					
None					
<b>GENITAL SYSTEM</b>					
Clitoral Gland	(9)	(0)	(0)	(0)	(10)
Ovary	(10)	(0)	(0)	(1)	(10)
Cyst				1	
Uterus	(10)	(0)	(0)	(0)	(10)
<b>HEMATOPOIETIC SYSTEM</b>					
Bone Marrow	(10)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(9)	(0)	(0)	(0)	(8)
Lymph Node, Mandibular	(9)	(0)	(0)	(0)	(8)
Lymph Node, Mediastinal	(2)	(0)	(0)	(0)	(2)

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<b>B6C3F1 Mouse FEMALE</b>	<b>CONTROL</b>	<b>62.5 PPM</b>	<b>125 PPM</b>	<b>250 PPM</b>	<b>500 PPM</b>
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(9)
Spleen	(10)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(10)
<b>INTEGUMENTARY SYSTEM</b>					
Mammary Gland	(10)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>					
Bone	(10)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>					
Brain	(10)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>					
Larynx	(10)	(0)	(10)	(10)	(10)
Metaplasia, Squamous				4 [1.0]	5 [1.0]
Lung	(10)	(10)	(10)	(10)	(10)
Arteriole, Hypertrophy			4 [1.5]	1 [2.0]	
Arteriole, Inflammation			5 [1.2]	2 [2.0]	
Bronchiole, Degeneration		10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]
Hemorrhage				1 [1.0]	
Nose	(10)	(10)	(10)	(10)	(10)
Olfactory Epi, Degeneration		10 [2.3]	10 [2.9]	10 [2.3]	10 [2.8]
Olfactory Epi, Inflammation, Suppurative				5 [1.2]	9 [1.9]
Olfactory Epi, Metaplasia		10 [2.3]	10 [2.8]	10 [1.5]	10 [1.7]
Olfactory Epi, Metaplasia, Squamous					1 [1.0]
Trachea	(10)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>					
None					
<b>URINARY SYSTEM</b>					

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Kidney	(10)	(0)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(0)	(10)

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**\*\* END OF REPORT \*\***

a - Number of animals examined microscopically at site and number of animals with lesion

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