

Experiment Number: 20727 - 02
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
ortho-Phthalaldehyde
CAS Number: 643-79-8

Date Report Requested: 10/16/2015
Time Report Requested: 12:33:56
First Dose M/F: 01/19/09 / 01/19/09
Lab: BNW

F1_Rev.2_M3

NTP Study Number: C20727
Lock Date: 08/21/2009
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

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B6C3F1 MICE MALE CONTROL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
		9	9	9	9	9	9	9	9	9	9		
		5	5	5	5	5	5	5	5	5	5		
		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	+	+	+	+	+	+	+	+	+	+		10
Inflammation, Neutrophil	1			1				1	1			4 1.0
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

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
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 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

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Lab: BNW

B6C3F1 MICE MALE CONTROL	DAY ON TEST	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	
		9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	
		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											

Blood Vessel + + + + + + + + + + **10**

Heart + + + + + + + + + + **10**

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**

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		0	0	0	0	0	0	0	0	0	0				
		9	9	9	9	9	9	9	9	9	9				
		5	5	5	5	5	5	5	5	5	5				
		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
Testes		+	+	+	+	+	+	+	+	+	+				10
HEMATOPOIETIC SYSTEM															
Bone Marrow		+	+	+	+	+	+	+	+	+	+				10
Lymph Node, Bronchial		M	+	+	M	+	+	+	+	+	M				7
Lymph Node, Mandibular		M	+	M	+	M	M	+	+	M	M				4
Lymph Node, Mediastinal		+	M	M	+	+	M	+	M	M	M				4
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+				10
Spleen		+	+	+	+	+	+	+	+	+	+				10
Thymus		+	+	+	+	+	+	+	+	+	+				10
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

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		0	0	0	0	0	0	0	0	0	
CONTROL	ANIMAL ID	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	
		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											

RESPIRATORY SYSTEM

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

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy				1		1					2 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	
		5	5	5	5	5	5	5	5	5	
0.44 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Germinal Epithelium, Depletion Cellular, Focal							1				1 1.0
Germinal Epithelium, Depletion Cellular, Multifocal				1							1 1.0
Seminiferous Tubule, Dilatation, Focal		1		1							2 1.0

HEMATOPOIETIC SYSTEM

Thymus	+	+	+	+	+	+	+	+	+	+	10
--------	---	---	---	---	---	---	---	---	---	---	-----------

INTEGUMENTARY SYSTEM

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B6C3F1 MICE MALE	DAY ON TEST										ANIMAL ID
	005	005	005	005	005	005	005	005	005	005	
0.44 ppm	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5	5
	0	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

Skin	+	+	+	+	+	+	+	+	+	+	10	
Hyperplasia, Squamous								2				1 2.0
Adnexa, Degeneration								2	1			2 1.5
Epithelium, Hair Follicle, Parakeratosis	1								1	1		3 1.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Lung	+	+	+	+	+	+	+	+	+	+	10	
Nose	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Suppurative	2	3	2	2	2	2	2	2	2	2		10 2.1
Glands, Olfactory Epithelium, Hyperplasia	1	2	1	1	1	2	2	2	1	1		10 1.4
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet			2	2		3	2	1	2	2		7 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	3	3	3	3	2	3	3	3	3		10 2.9
Olfactory Epithelium, Atrophy	3	3	2	2	2	3	2	2	2	2		10 2.3
Olfactory Epithelium, Metaplasia, Respiratory			2									1 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	3	3	3	3	3	2	4	3	3	3		10 3.0
Respiratory Epithelium, Metaplasia, Squamous	2	2	1	1	2	2	2	2	1	2		10 1.7

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B6C3F1 MICE MALE	DAY ON TEST											
	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5		
0.44 ppm	ANIMAL ID											
	0	0	0	0	0	0	0	0	0	0		
	2	0	0	0	0	0	0	0	0	0		
	0	2	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
* TOTALS												
Respiratory Epithelium, Necrosis	1	1									2	1.0
Turbinate, Atrophy				1		1			1	1	4	1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10	
SPECIAL SENSES SYSTEM												
Eye	+	+	+	+	+	+	+	+	+	+	10	
Cornea, Inflammation, Suppurative					2						1	2.0
URINARY SYSTEM												
NONE												

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B6C3F1 MICE MALE	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	
		5	5	5	5	5	5	5	5	5	
		5	5	5	5	5	5	5	5	5	
0.88 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
Germinal Epithelium, Depletion Cellular, Multifocal				1							1 1.0

HEMATOPOIETIC SYSTEM

Thymus	+	+	+	+	+	+	+	+	+	+	10
--------	---	---	---	---	---	---	---	---	---	---	-----------

INTEGUMENTARY SYSTEM

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

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	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	0 9 5	
0.88 ppm	ANIMAL ID										
	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	
Epithelium, Hair Follicle, Parakeratosis										1 1 1 1	4 1.0

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	I	+	+	9	
Metaplasia, Squamous									1			1 1.0
Lung	+	+	+	+	+	+	+	+	+	+	10	
Nose	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Suppurative	3	2	2	2	3	3	3	3	3	3		10 2.7
Glands, Olfactory Epithelium, Hyperplasia	2	1	2	2	1	2	1	2	1	2		10 1.6
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	1	3	3	2	3	2	3	3	1	3		10 2.4
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	3	3	3	3	3	3	3	3	3		10 3.0
Olfactory Epithelium, Atrophy	2	2	2	2	2	2	2	2	2	1		10 1.9
Olfactory Epithelium, Metaplasia, Respiratory	2		1	1	1	1	2	2	1			8 1.4
Olfactory Epithelium, Metaplasia, Squamous							2	2				2 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	4	4	4	4	3	3	4	3	3	3		10 3.5
Respiratory Epithelium, Metaplasia, Squamous	2	1	2	2	2	2	3	3	2	2		10 2.1
Respiratory Epithelium, Necrosis	1		1		2	2		1		1		6 1.3
Respiratory Epithelium, Regeneration						1						1 1.0

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B6C3F1 MICE MALE	DAY ON TEST										ANIMAL ID			
	005	005	005	005	005	005	005	005	005	005				
0.88 ppm	0	0	0	0	0	0	0	0	0	0	004			
	0	0	0	0	0	0	0	0	0	0	000			
	4	4	4	4	4	4	4	4	4	4	001			
	0	0	0	0	0	0	0	0	0	1	002			
	1	2	3	4	5	6	7	8	9	0				
													* TOTALS	
Respiratory Epithelium, Ulcer							1	1	1				3 1.0	
Turbinate, Atrophy	2				2	2	1	2	1				6 1.7	
Trachea	+	+	+	+	+	+	+	+	+	+			10	
SPECIAL SENSES SYSTEM														
Eye	+	+	+	+	+	+	+	+	+	+			10	
URINARY SYSTEM														
NONE														

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B6C3F1 MICE MALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
1.75 ppm	ANIMAL ID	5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	0	
		6	6	6	6	6	6	6	6	6	
		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	+	9
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	+	+	+	+	+	+	+	+	+	+	10
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* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE	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	
		5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	0	
1.75 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

Heart	+	+	+	+	+	+	+	+	+	+	10
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ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
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

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

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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE	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	9	9	9	9	9	9	9	9	9
1.75 ppm	ANIMAL ID	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	6	6	6	6	6	6	6	6
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0								
* TOTALS																			

HEMATOPOIETIC SYSTEM

Bone Marrow Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	2	1.0
Lymph Node, Bronchial	M	+	M	+	+	M	M	M	M	M	+								4		
Lymph Node, Mandibular	+	+	+	+	+	M	M	M	M	M	+								6		
Lymph Node, Mediastinal	M	+	M	M	M	M	M	M	M	M									1		
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10		
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10		
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10		

INTEGUMENTARY SYSTEM

Mammary Gland	M	M	M	M	M	M	M	M	M	M	M								0		
Skin Inflammation, Chronic Active	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	9	1	1.0
Adnexa, Degeneration					2	1	3												4	2.0	
Epithelium, Hair Follicle, Parakeratosis										1	1								2	1.0	

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10		
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NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST										ANIMAL ID		
	0	0	0	0	0	0	0	0	0	0			
1.75 ppm	0	0	0	0	0	0	0	0	0	0	0		
	9	9	9	9	9	9	9	9	9	9	0		
	5	5	5	5	5	5	5	5	5	5	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	0	1	0		
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Brain	+	+	+	+	+	+	+	+	+	+			10
RESPIRATORY SYSTEM													
Larynx	+	+	+	+	+	+	+	+	+	+			10
Inflammation, Chronic Active		1			1		1		1				4 1.0
Metaplasia, Squamous	3	2	3	3	3	2	2	1	2	3			10 2.4
Ulcer			2										1 2.0
Lung	+	+	+	+	+	+	+	+	+	+			10
Nose	+	+	+	+	+	+	+	+	+	+			10
Inflammation, Suppurative	4	4	4	4	4	4	4	4	4	4			10 4.0
Glands, Olfactory Epithelium, Hyperplasia	2		1	2	1	2	2	2					7 1.7
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet		1	1		1			1	1	1			6 1.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	3	2	2	3	2	2			10 2.2
Olfactory Epithelium, Atrophy	3	3	3	3	2	3	2	3	2	2			10 2.6
Olfactory Epithelium, Metaplasia, Respiratory	3	2	1	3	1	2	1	2	1	3			10 1.9
Olfactory Epithelium, Metaplasia, Squamous				1									1 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	4	4	4	3	4	3	4	4	4	4			10 3.8
Respiratory Epithelium, Metaplasia, Squamous	2	3	2	3	3	3	2	3	3	3			10 2.7
Respiratory Epithelium, Necrosis		1	1		1			2	1				5 1.2
Turbinate, Atrophy	3	3	4	3	2	3	3	3	2	2			10 2.8
Trachea	+	+	+	+	+	+	+	+	+	+			10
Inflammation, Chronic Active	1												1 1.0
Metaplasia, Squamous			1	1			1						3 1.0

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE	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	
		5	5	5	5	5	5	5	5	5	
1.75 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy	1										1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 3.5 ppm	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	3	3	9	3	3	9	9	9	3	
		5	9	9	5	2	3	5	5	5	3	
		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	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10	
Gallbladder	+	+	M	+	+	+	+	+	+	+	9	
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 Necrosis	+	+	+	+	+	+	+	+	+	+	10	2 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10	
Stomach, Forestomach Hyperplasia, Squamous	+	+	+	+	+	+	+	+	+	+	10	1 1.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10	

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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 1) Minimal 3) Moderate
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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 3.5 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	3	3	9	3	3	9	9	3	
		5	9	9	5	2	3	5	5	3	
	ANIMAL ID	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		
	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0	
* TOTALS											

Heart	+	+	+	+	+	+	+	+	+	+	10
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ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	M	+	+	M	M	M	+	6
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	M	+	9

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Duct, Exfoliated Germ Cell		1			1		1	2			4 1.3
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	4										1 4.0
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE MALE 3.5 ppm	DAY ON TEST										* TOTALS			
	0 9 5	0 3 9	0 3 9	0 9 5	0 3 2	0 3 3	0 9 5	0 9 5	0 9 5	0 9 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				
Inflammation, Chronic	2										1 2.0			
Testes	+ + + + + + + + + +										10			
Germinal Epithelium, Depletion Cellular, Multifocal	1	1			2	1	1	1		2	7 1.3			
Interstitial Cell, Atrophy	2 2										2	3 2.0		
HEMATOPOIETIC SYSTEM														
Bone Marrow	+ + + + + + + + + +										10			
Hyperplasia	2 2		1 1										5 1.4	
Lymph Node, Bronchial	M	M	+	+	M	+	+	M	M	+	5			
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	M	+	9			
Lymph Node, Mediastinal	M	+	+	+	M	M	M	M	M	+	4			
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10			
Spleen	+	+	+	+	+	+	+	+	+	+	10			
Thymus	+	+	+	+	M	+	+	+	+	+	9			
Atrophy, Lymphoid	2 2		1		1									5 1.4
INTEGUMENTARY SYSTEM														
Mammary Gland	M	M	M	M	M	M	M	M	M	M	0			
Skin	+	+	+	+	+	+	+	+	+	+	10			
Hyperplasia, Squamous	2	2	2		1	2	2	1	2	1	9 1.7			
Inflammation, Chronic Active	1	2	2	1	2	2	2	1	2	3	10 1.8			

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+ .. Tissue examined microscopically

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		9	3	3	9	3	3	9	9	9	3	5	5	5	5	3	3	3	3	3
3.5 ppm	ANIMAL ID	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	8	8	8	8	1	0	0	0	0
		1	2	3	4	5	6	7	8	9	0									

*** TOTALS**

Ulcer																					1	1.0	
Adnexa, Degeneration					1																	1	1.0
Epithelium, Hair Follicle, Parakeratosis		1	2																			2	1.5

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
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NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
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RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	1.3
Metaplasia, Squamous	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	10	4.0
Necrosis			2																			1	2.0

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	
Bronchiole, Goblet Cell, Hyperplasia		1			1					1	1											4	1.0
Bronchus, Inflammation, Chronic Active																						2	1.0
Bronchus, Metaplasia, Squamous																						2	1.0
Bronchus, Necrosis			1			1																2	1.0
Bronchus, Regeneration			1																			1	1.0
Perivascular, Inflammation, Chronic Active	1																					1	1.0

Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Suppurative	3	3	3	4	2	3	4	4	4	4	2											10	3.2
Glands, Olfactory Epithelium, Hyperplasia	2	1	1						2	1	2											6	1.5

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 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 3.5 ppm	DAY ON TEST										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		
	9	3	3	9	3	3	9	9	9	3	8	8	8		
	5	9	9	5	2	3	5	5	5	3	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	0	0	0	1	1	2	3		
	1	2	3	4	5	6	7	8	9	0					
													* TOTALS		
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	3	3	2	2	2	2	2	2	2				9	2.2
Olfactory Epithelium, Atrophy	2	2	3	3	2	2	3	2	2	2				10	2.3
Olfactory Epithelium, Metaplasia, Respiratory				2			1	2	1					4	1.5
Olfactory Epithelium, Metaplasia, Squamous									1	2				2	1.5
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	3	3	2	1	1	3	1	2	2				10	2.0
Respiratory Epithelium, Metaplasia, Squamous	3	3	2	2	2	2	3	2	3	2				10	2.4
Respiratory Epithelium, Necrosis		3	3	2	2	1	2	1	1	2				9	1.9
Respiratory Epithelium, Regeneration		2												1	2.0
Turbinate, Atrophy	3			2	2	2	3	3	3	1				8	2.4
Trachea	+	+	+	+	+	+	+	+	+	+				10	
Inflammation, Chronic Active	1	1	1	1	1		2	1	3	1				9	1.3
Metaplasia, Squamous	4	2	2	4	1	2	4	4	3	2				10	2.8

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+				10	
Cornea, Inflammation, Suppurative		1												1	1.0
Cornea, Necrosis		1												1	1.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+				10	

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+				10	
Inflammation, Chronic Active				4										1	4.0
Nephropathy							1							1	1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+				10	

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 7.0 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		
		4	3	4	5	5	6	6	6	5	4		
		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
Inflammation, Chronic Active				2								1 2.0
Necrosis				3								1 3.0
Gallbladder	A	+	A	A	A	+	A	+	A			3
Intestine Large, Cecum	+	+	A	A	+	+	+	A	+	+		7
Intestine Large, Colon	+	+	+	A	+	+	+	A	+	+		8
Intestine Large, Rectum	+	+	+	A	+	I	+	A	+	+		7
Intestine Small, Duodenum	A	+	A	A	A	A	+	A	+	A		3
Intestine Small, Ileum	A	+	A	A	A	A	+	A	+	A		3
Intestine Small, Jejunum	A	+	A	A	A	A	+	A	+	A		3
Liver	+	+	+	+	+	+	+	+	+	+		10
Pancreas	+	+	+	+	+	+	+	+	+	+		10
Salivary Glands	+	+	+	+	+	+	M	+	+	+		9
Stomach, Forestomach	+	+	A	+	+	+	+	+	+	+		9
Stomach, Glandular	+	+	A	A	+	+	+	+	+	+		8

CARDIOVASCULAR SYSTEM

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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 7.0 ppm	DAY ON TEST										ANIMAL ID	
	0 4	0 3	0 4	0 5	0 5	0 6	0 6	0 6	0 5	0 4		
	0	0	0	0	0	0	0	0	0	0	0 1	
	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	0	0	0	0	1	1 0	
	1	2	3	4	5	6	7	8	9	0		* TOTALS

Blood Vessel		+		+								2
Heart	+	+	+	+	+	+	+	+	+	+		10

ENDOCRINE SYSTEM

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+		10
Duct, Exfoliated Germ Cell					1							1 1.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+		10
Prostate	+	+	+	+	I	+	+	+	+	+		9

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 2) Mild 4) Marked

Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE MALE 7.0 ppm	DAY ON TEST										* TOTALS
	0 4	0 3	0 4	0 5	0 5	0 6	0 6	0 6	0 5	0 4	
ANIMAL ID	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	
	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	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 0	0	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10
HEMATOPOIETIC SYSTEM											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia		2			2	2	2	2	2	1	7 1.9
Lymph Node, Bronchial	+	+	+	M	M	+	M	+	+	M	6
Lymph Node, Mandibular	M	M	+	M	+	M	M	+	+	+	5
Lymph Node, Mediastinal	+	M	M	+	M	M	M	M	+	M	3
Lymph Node, Mesenteric	+	+	+	+	+	M	M	A	+	+	7
Spleen	+	+	+	+	+	+	+	+	+	+	10
Atrophy, Lymphoid	2	1	2	2	2	2	2	2	2	2	10 1.9
Thymus	+	+	+	+	+	+	+	+	+	+	10
Atrophy, Lymphoid	3	2	3	3	3	3	2	3	3	2	10 2.7
INTEGUMENTARY SYSTEM											
Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia, Squamous			1				2	3	2		4 2.0
Inflammation, Chronic Active	1	1	2	1	1	1	1	1		1	9 1.1
Adnexa, Degeneration			1	1	3	3	1	3			6 2.0

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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 7.0 ppm	DAY ON TEST										ANIMAL ID			
	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0			
	4	3	4	5	5	6	6	6	5	4	0			
	0	0	0	0	0	0	0	0	0	0	0			
	1	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	0	1	1			
	1	2	3	4	5	6	7	8	9	0	0			
												* TOTALS		
Adnexa, Pinna, Degeneration	2	2	1	2	2	2	3	2	2	2			10	2.0
Epidermis, Necrosis			2				2			2			3	2.0
Epithelium, Hair Follicle, Parakeratosis	1	1	1	1	1	2	4	3	2	2			10	1.8
Epithelium, Hair Follicle, Pinna, Parakeratosis	2	2	2	2	2	2	3	2	2	2			10	2.1
Pinna, Hyperplasia, Squamous	1	1	1	1	2	3	4	3	2	2			10	2.0
Pinna, Inflammation, Chronic Active	2	2	1	1	2	2	3	2	1	2			10	1.8
MUSCULOSKELETAL SYSTEM														
Bone	+	+	+	+	+	+	+	+	+	+			10	
NERVOUS SYSTEM														
Brain	+	+	+	+	+	+	+	+	+	+			10	
RESPIRATORY SYSTEM														
Larynx	+	+	+	+	+	+	+	+	+	+			10	
Inflammation, Chronic Active	3	3	4	1	3	4	3	2	3	4			10	3.0
Metaplasia, Squamous	4	2	2		4	4	4	4	4				8	3.5
Necrosis	3	3	4	3	3	2	3	3	3	4			10	3.1
Lung	+	+	+	+	+	+	+	+	+	+			10	
Bronchus, Inflammation, Chronic Active		2	2			2	1		1	1			6	1.5
Bronchus, Necrosis	3	3	3	1	2	3	3		2	2			9	2.4
Bronchus, Regeneration		2											1	2.0
Nose	+	+	+	+	+	+	+	+	+	+			10	
Inflammation, Suppurative	2	2	2	2	2	1	2	4	1	1			10	1.9
Olfactory Epithelium, Atrophy	2	1	1	1	2	2	2	1	2	1			10	1.5
Olfactory Epithelium, Necrosis	2	3	3	1				2					5	2.2

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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE MALE 7.0 ppm	DAY ON TEST										
	0 4	0 3	0 4	0 5	0 5	0 6	0 6	0 6	0 5	0 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											
Respiratory Epithelium, Metaplasia, Squamous					1	2	1	1	1	1	6 1.2
Respiratory Epithelium, Necrosis	3	3	3	3	3	3	2	4	2	2	10 2.8
Respiratory Epithelium, Regeneration		1	2				1		1		4 1.3
Trachea	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	2	2	1	1	2	1	2	2	2	1	10 1.6
Metaplasia, Squamous					3	1		2			3 2.0
Necrosis	2	3	3	3	1	2	4		2	4	9 2.7
Regeneration		2	2	2		1			1		5 1.6
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Cornea, Inflammation, Suppurative			1	1		1			1		4 1.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

*** END OF MALE DATA ***

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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
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 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE CONTROL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
		9	9	9	9	9	9	9	9	9	9		
		6	6	6	6	6	6	6	6	6	6		
		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	+	+	+	+	+	+	+	+	+	+		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

Blood Vessel	+	+	+	+	+	+	+	+	+	+		10
--------------	---	---	---	---	---	---	---	---	---	---	--	-----------

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Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

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 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE CONTROL	DAY ON TEST										ANIMAL ID			
	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6				
	0	0	0	0	0	0	0	0	0	0	0 0 1 0 1			
	0	0	0	0	0	0	0	0	0	0	0 0 1 0 1			
	0	0	0	0	0	0	0	0	0	0	1 1 0 0 1			
	0	0	0	0	0	0	0	0	0	0	2 3 4 5 6 7 8 9 0			
	* TOTALS													
Heart	+	+	+	+	+	+	+	+	+	+				10
ENDOCRINE SYSTEM														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+				10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+				10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+				10
Parathyroid Gland	M	+	M	+	M	+	+	M	+	+				6
Pituitary Gland	+	+	+	+	+	+	+	+	+	+				10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+				10
GENERAL BODY SYSTEM														
NONE														
GENITAL SYSTEM														
Clitoral Gland	+	+	+	+	+	+	+	+	+	M				9
Ovary Cyst	+	+	+	+	+	+	+	+	+	+		2		10 1 2.0
Uterus	+	+	+	+	+	+	+	+	+	+				10
HEMATOPOIETIC SYSTEM														

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 M .. Missing tissue
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE FEMALE CONTROL	DAY ON TEST										* TOTALS
	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	
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	
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	M	+	4
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia, Squamous			2		1				1		3 1.3
Inflammation, Chronic Active					1						1 1.0
Adnexa, Degeneration							1		1		2 1.0
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	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	
		6	6	6	6	6	6	6	6	6	
CONTROL	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

RESPIRATORY SYSTEM

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

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy						1					1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE 0.44 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	
		6	6	6	6	6	6	6	6	6	
	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	
											* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Thymus + + + + + + + + + + **10**

INTEGUMENTARY SYSTEM

Skin + + + + + + + + + + **10**

Inflammation, Chronic Active 1 **1 1.0**

Epithelium, Hair Follicle, Parakeratosis 1 1 1 **3 1.0**

MUSCULOSKELETAL 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: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9	9	9	9
0.44 ppm	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	3	3	3	3	3	3	3	3	3	3	3	3
		0	0	0	0	0	0	0	0	0	0	1	0	0
		1	2	3	4	5	6	7	8	9	0			
* TOTALS														

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Suppurative	2	2	2	2	2	2	2	2	2	2	10 2.0
Glands, Olfactory Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	2	3	10 2.1
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	2	4	2	2		3	1	2	2	1	9 2.1
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	3	3	3	3	3	3	3	3	3	10 3.0
Olfactory Epithelium, Atrophy	2	3	2	2	3	3	2	2	2	2	10 2.3
Olfactory Epithelium, Metaplasia, Respiratory	1			2						1	3 1.3
Olfactory Epithelium, Necrosis										1	1 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	3	3	3	3	3	3	3	3	3	3	10 3.0
Respiratory Epithelium, Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2	10 2.0
Respiratory Epithelium, Necrosis					1					1	2 1.0
Turbinate, Atrophy	1	1		1	1			1	1	1	7 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		ANIMAL ID	0	0	0	0	0	0	0	0	0
0.44 ppm		9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	
		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	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									
Eye		+	+	+	+	+	+	+	+	+	+
		10									

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	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	
		6	6	6	6	6	6	6	6	6	
0.88 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Thymus + + + + + + + M + + **9**

INTEGUMENTARY SYSTEM

Skin + + + + + + + + + **10**

Inflammation, Chronic Active 1 1 1 **3 1.0**

Epithelium, Hair Follicle, Parakeratosis 1 1 1 1 1 1 1 **7 1.0**

MUSCULOSKELETAL 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: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	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	9	9	9	9	9	9	9	9	9
0.88 ppm	ANIMAL ID	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	5	5	5	5	5	5	5	5
		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																			

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+									10			
Metaplasia, Squamous			1		1	2															3	1.3
Lung	+	+	+	+	+	+	+	+	+	+											10	
Nose	+	+	+	+	+	+	+	+	+	+											10	
Inflammation, Suppurative	3	4	2	3	3	3	4	3	3	4											10	3.2
Glands, Olfactory Epithelium, Hyperplasia	2	2	3	2	2	2	2			2	2										9	2.1
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1	2	2	2	3	2	3	3	2											10	2.1
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	3	3	2	3	3	3	3	3	3											10	2.8
Olfactory Epithelium, Atrophy	2	2	2	2	2	3	2	1	2	3											10	2.1
Olfactory Epithelium, Metaplasia, Respiratory	1		2			1	1	1		1											6	1.2
Respiratory Epithelium, Accumulation, Hyaline Droplet	4	3	3	4	4	3	3	3	3	3											10	3.3
Respiratory Epithelium, Metaplasia, Squamous	3	3	2	2	3	3	2	3	3	3											10	2.7
Respiratory Epithelium, Necrosis	1	1	1		2	1	1		1												7	1.1
Turbinate, Atrophy	3	3		2	2	3	2	1	1	2											9	2.1
Trachea	+	+	+	+	+	+	+	+	+	+											10	

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0.88 ppm	ANIMAL ID	0	0	0	0	0	0	0	0
		5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0
* TOTALS											
Eye		+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE 1.75 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	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9	9	9	9	9
		6	6	6	6	6	6	6	6	6	6	6	6	6	6
	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
		7	7	7	7	7	7	7	7	7	7	7	7	7	7
		0	0	0	0	0	0	0	0	0	0	0	1	0	0
		1	2	3	4	5	6	7	8	9	0				

*** TOTALS**

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex

+

1

Adrenal Medulla

+

1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Lymph Node

+

1

Deep Cervical, Hyperplasia, Lymphoid

2

1 2.0

Thymus

+ + + + + + + + + +

10

INTEGUMENTARY SYSTEM

Skin

+ + + + + + + + + +

10

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

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE FEMALE 1.75 ppm	DAY ON TEST										* TOTALS
	0096	0096	0096	0096	0096	0096	0096	0096	0096	0096	
ANIMAL ID	0070	0070	0070	0070	0070	0070	0070	0070	0070	0070	
	0071	0071	0071	0071	0071	0071	0071	0071	0071	0071	
	0072	0072	0072	0072	0072	0072	0072	0072	0072	0072	
	0073	0073	0073	0073	0073	0073	0073	0073	0073	0073	
Hyperplasia, Squamous		1	1			2	1	1		2	6 1.3
Inflammation, Chronic Active	1	1		1	1	1	2	1	1	1	9 1.1
Adnexa, Degeneration			1								1 1.0
Epithelium, Hair Follicle, Parakeratosis	1	1	1		1	1	1	1	1	2	9 1.1

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Metaplasia, Squamous	2	2	2	2	3	2	2	2	2	2	10 2.1
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Suppurative	4	4	4	4	4	4	4	4	4	4	10 4.0
Glands, Olfactory Epithelium, Hyperplasia	2	1	1	2	1	2	2	1	2	1	10 1.5
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet			1		2	2	2			3	6 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	1	2	1	2	2	3	2	2	3	2	10 2.0
Olfactory Epithelium, Atrophy	2	1	3	3	3	3	2	3	3	3	10 2.6
Olfactory Epithelium, Metaplasia, Respiratory	1							1	1		3 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	3	4	4	3	4	4	3	4	4	3	10 3.6
Respiratory Epithelium, Metaplasia, Squamous	2	2	2	3	3	3	3	3	3	3	10 2.7

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20727 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

ortho-Phthalaldehyde

CAS Number: 643-79-8

Date Report Requested: 10/16/2015

Time Report Requested: 12:33:56

First Dose M/F: 01/19/09 / 01/19/09

Lab: BNW

B6C3F1 MICE FEMALE 1.75 ppm	DAY ON TEST										ANIMAL ID	
	0066	0066	0066	0066	0066	0066	0066	0066	0066	0066		
	0	0	0	0	0	0	0	0	0	0	0066	
	0	0	0	0	0	0	0	0	0	0	0066	
	9	9	9	9	9	9	9	9	9	9	0066	
	6	6	6	6	6	6	6	6	6	6	0066	
	0	0	0	0	0	0	0	0	0	0	0066	
	0	0	0	0	0	0	0	0	0	0	0066	
	7	7	7	7	7	7	7	7	7	7	0066	
	0	0	0	0	0	0	0	0	0	1	0066	
	1	2	3	4	5	6	7	8	9	0	0066	
	* TOTALS											
Respiratory Epithelium, Necrosis	1		1		2	2		1		1		6 1.3
Respiratory Epithelium, Regeneration			1									1 1.0
Turbinate, Atrophy	2	2	4	3	4	4	3	4	3	4		10 3.3
Trachea	+	+	+	+	+	+	+	+	+	+		10
SPECIAL SENSES SYSTEM												
Eye	+	+	+	+	+	+	+	+	+	+		10
URINARY SYSTEM												
NONE												

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE 3.5 ppm	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	
	0	0	0	0	0	0	0	0	0	0	0	
	9	1	1	9	9	3	9	9	0	9		
	6	7	8	6	6	9	6	6	4	6		
	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		

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10	
Gallbladder	+	M	+	+	+	+	+	+	+	+	9	
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 Necrosis	+	+	+	+	+	+	+	+	+	+	10	1 2.0
Pancreas Cyst	+	+	+	+	+	+	+	+	+	+	10	1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10	

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 20727 - 02
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 ortho-Phthalaldehyde
 CAS Number: 643-79-8

Date Report Requested: 10/16/2015
 Time Report Requested: 12:33:56
 First Dose M/F: 01/19/09 / 01/19/09
 Lab: BNW

B6C3F1 MICE FEMALE 3.5 ppm	DAY ON TEST										ANIMAL ID
	0 9 6	0 1 7	0 1 8	0 9 6	0 9 6	0 3 9	0 9 6	0 9 6	0 0 4	0 0 6	
	0	0	0	0	0	0	0	0	0	0	0 9 0 1
	1	2	3	4	5	6	7	8	9	0	
											* TOTALS

Blood Vessel	+		+	+	+	+	+	+	+	+	9
Heart	+	+	+	+	+	+	+	+	+	+	10

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	M	M	M	+	+	M	M	+	+	5
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	M	+	+	M	+	8
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

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 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: MICE/B6C3F1

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 Lab: BNW

B6C3F1 MICE FEMALE 3.5 ppm	DAY ON TEST										* TOTALS	
	0 9 6	0 1 7	0 1 8	0 9 6	0 9 6	0 3 9	0 9 6	0 9 6	0 0 4	0 0 6		
	ANIMAL ID											
	0 9 0 1	0 0 0 2	0 0 0 3	0 0 0 4	0 0 0 5	0 0 0 6	0 0 0 7	0 0 0 8	0 0 0 9	0 0 0 0		
Bone Marrow Hyperplasia	+	+	+	+	+	+	+	+	+	+	10	8 2.0
Lymph Node, Bronchial	+	+	M	+	+	M	M	M	+	+	6	
Lymph Node, Mandibular	+	+	+	M	+	+	+	+	+	M	8	
Lymph Node, Mediastinal	M	+	M	M	+	+	M	M	M	M	3	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10	
Spleen Atrophy, Lymphoid	+	+	+	+	+	+	+	+	+	+	10	1 1.0
Thymus Atrophy, Lymphoid	+	+	+	+	+	+	+	+	+	+	10	6 2.0
INTEGUMENTARY SYSTEM												
Mammary Gland	+	+	+	+	+	+	+	+	M	+	9	
Skin Hyperplasia, Squamous	+	+	+	+	+	+	+	+	+	+	10	9 1.7
Inflammation, Chronic Active	2	1	1	2	2	2	2	1		2	9	1.9
Epithelium, Hair Follicle, Parakeratosis	2	1	1	1	1	1	1	1	1	1	10	1.1
MUSCULOSKELETAL SYSTEM												
Bone	+	+	+	+	+	+	+	+	+	+	10	
NERVOUS SYSTEM												

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 Species/Strain: MICE/B6C3F1

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B6C3F1 MICE FEMALE 3.5 ppm	DAY ON TEST										ANIMAL ID	
	0 9 6	0 1 7	0 1 8	0 9 6	0 9 6	0 3 9	0 9 6	0 9 6	0 9 4	0 0 6		
	0 9 0 1	0 0 9 2	0 0 9 3	0 0 9 4	0 0 9 5	0 0 9 6	0 0 9 7	0 0 9 8	0 0 9 9	0 0 9 0	0 0 9 1	
	* TOTALS											

Brain + + + + + + + + + + 10

RESPIRATORY SYSTEM

Larynx	+ + + + + + + + + +	10	
Inflammation, Chronic Active	1 2 1 2 3 3 1 2 2		9 1.9
Metaplasia, Squamous	4 4 4 4 4 4 4 3 4		10 3.9
Necrosis	1 3 2		3 2.0
Lung	+ + + + + + + + + +	10	
Bronchiole, Goblet Cell, Hyperplasia	1 2 2 1 2 1		6 1.5
Bronchus, Inflammation, Chronic Active	1 1 1 2 1 1		6 1.2
Bronchus, Necrosis	1 3		2 2.0
Nose	+ + + + + + + + + +	10	
Inflammation, Suppurative	3 2 2 4 4 3 4 4 1 3		10 3.0
Glands, Olfactory Epithelium, Hyperplasia	2 1 2 2 3 2 1 3		8 2.0
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	1 1		2 1.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2 1 1 1 2 1		6 1.3
Olfactory Epithelium, Atrophy	2 2 2 3 2 3 3 2 3		9 2.4
Olfactory Epithelium, Metaplasia, Respiratory	2 3 2 2		4 2.3
Olfactory Epithelium, Necrosis	2		1 2.0
Olfactory Epithelium, Regeneration	2		1 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2 1 1 3 2 3 2 2		8 2.0
Respiratory Epithelium, Metaplasia, Squamous	3 1 3 3 2 3 3 3		8 2.6
Respiratory Epithelium, Necrosis	2 2 1 1 2 2 1 1		8 1.5
Respiratory Epithelium, Regeneration	2 2 2		3 2.0

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B6C3F1 MICE FEMALE 3.5 ppm	DAY ON TEST										ANIMAL ID			
	0 9 6	0 1 7	0 1 8	0 9 6	0 9 6	0 3 9	0 9 6	0 9 6	0 9 6	0 0 4				0 0 6
	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	1	1			
	1	2	3	4	5	6	7	8	9	0	0			
												* TOTALS		
Turbinate, Atrophy	3		3	3	3		3	3		4				7 3.1
Trachea	+	+	+	+	+	+	+	+	+	+				10
Inflammation, Chronic Active	2	2	2	3	1	2	3	2	1	1				10 1.9
Metaplasia, Squamous	4		2	4	4	1	4	4	1	4				9 3.1
Necrosis			1				2							2 1.5
Regeneration			1											1 1.0
Ulcer			2											1 2.0
SPECIAL SENSES SYSTEM														
Eye	+	+	+	+	+	+	+	+	+	+				10
Cornea, Inflammation, Suppurative			1			1								2 1.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+				10
URINARY SYSTEM														
Kidney	+	+	+	+	+	+	+	+	+	+				10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+				10

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 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	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	
		3	6	5	5	5	6	4	3	4	5
7.0 ppm	ANIMAL ID	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	
		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	M	A	A	A	A	A	A	A	+	1
Intestine Large, Cecum	A	A	+	A	A	A	+	+	A	+	4
Intestine Large, Colon	A	A	+	A	A	A	+	A	A	+	3
Intestine Large, Rectum	A	A	+	A	A	A	+	+	A	+	4
Intestine Small, Duodenum	A	A	A	A	A	A	+	A	A	+	2
Intestine Small, Ileum	A	A	A	A	A	A	+	A	A	+	2
Intestine Small, Jejunum	A	A	A	A	A	A	+	A	A	+	2
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	A	+	+	+	+	A	+	+	+	+	8
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	A	+	A	A	+	+	+	7
Stomach, Glandular	+	+	+	A	+	A	A	+	+	+	7

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
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 Species/Strain: MICE/B6C3F1

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 ortho-Phthalaldehyde
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 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	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	
		3	6	5	5	5	6	4	3	4	5
7.0 ppm	ANIMAL ID	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											

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	A	+	+	+	+	A	+	+	+	+	8
Parathyroid Gland	M	+	+	M	M	M	+	+	M	M	4
Pituitary Gland	+	A	A	+	+	M	+	+	+	+	7
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	M	+	+	+	M	+	+	+	+	8
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	A	A	+	+	+	8

HEMATOPOIETIC SYSTEM

Bone Marrow	+	A	+	+	A	+	A	+	+	+	7
Lymph Node, Bronchial	M	+	+	+	+	M	M	+	+	+	7

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 Lab: BNW

B6C3F1 MICE FEMALE 7.0 ppm	DAY ON TEST										ANIMAL ID				
	0 0 0 3	0 0 0 6	0 0 0 5	0 0 0 5	0 0 0 5	0 0 0 6	0 0 0 4	0 0 0 3	0 0 0 4	0 0 0 5					
	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	1	1	1				
	0	0	0	0	0	0	0	0	0	1	1				
	1	2	3	4	5	6	7	8	9	0					
															* TOTALS
Lymph Node, Mandibular	M	+	M	M	+	M	M	+	M	+					4
Lymph Node, Mediastinal	M	M	M	M	M	M	M	+	M	+					2
Lymph Node, Mesenteric	+	A	+	A	+	A	+	+	A	+					6
Spleen	+	+	+	A	+	+	+	+	+	M					8
Atrophy, Lymphoid	1	2	1		2	3	1	1	2						8 1.6
Thymus	+	+	+	+	+	+	+	+	+	+					10
Atrophy, Lymphoid	1	3	3	3	3	3	3	1	3	3					10 2.6
INTEGUMENTARY SYSTEM															
Mammary Gland	+	+	+	+	+	M	+	+	+	+					9
Skin	+	+	+	+	+	+	+	+	+	+					10
Hyperplasia, Squamous	1	1	1		1				1	1					6 1.0
Inflammation, Chronic Active	1		2	1		1	2	1	1	1					8 1.3
Adnexa, Degeneration	1	1	1	2	2	2	1	1	1						9 1.3
Adnexa, Pinna, Degeneration	1	2	2	2	2	2	2	1	1	2					10 1.7
Epidermis, Necrosis			3	1			3	3		1					5 2.2
Epithelium, Hair Follicle, Parakeratosis	1	2	2	3	2	3	2	1	2	3					10 2.1
Epithelium, Hair Follicle, Pinna, Parakeratosis	2	2	2	2	2	2	2	2	2	2					10 2.0
Pinna, Hyperplasia, Squamous	1	2	2	2	1	1	1	1	1	3					10 1.5
Pinna, Inflammation, Chronic Active	2	1	1	1	2	2	1	1	1	2					10 1.4
MUSCULOSKELETAL SYSTEM															
Bone	+	+	+	+	+	+	+	+	+	+					10

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 Species/Strain: MICE/B6C3F1

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 Lab: BNW

B6C3F1 MICE FEMALE	DAY ON TEST	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	
		3	6	5	5	5	6	4	3	4	5
7.0 ppm	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

NERVOUS SYSTEM

Brain + + + + + + + + + + **10**

RESPIRATORY SYSTEM

Larynx + + + + + + + + + + **10**
 Inflammation, Chronic Active 3 3 2 3 3 3 4 4 3 3 **10 3.1**
 Metaplasia, Squamous 4 4 4 4 4 2 4 4 **8 3.8**
 Necrosis 3 2 3 2 2 3 3 3 2 **9 2.6**
 Regeneration 1 2 2 **3 1.7**
 Ulcer 2 **1 2.0**

Lung + + + + + + + + + + **10**
 Bronchus, Inflammation, Chronic Active 2 1 2 2 1 1 1 1 **8 1.4**
 Bronchus, Necrosis 3 3 3 3 2 3 3 2 **8 2.8**
 Bronchus, Regeneration 1 **1 1.0**
 Bronchus, Ulcer 3 2 **2 2.5**

Nose + + + + + + + + + + **10**
 Inflammation, Suppurative 2 1 2 1 2 1 2 **6 1.5**
 Olfactory Epithelium, Atrophy 2 2 1 2 1 2 2 2 **9 1.8**
 Respiratory Epithelium, Necrosis 2 3 2 3 2 3 2 3 3 **10 2.5**
 Respiratory Epithelium, Regeneration 2 2 1 1 2 2 **6 1.7**
 Respiratory Epithelium, Ulcer 1 1 **2 1.0**

Trachea + + + + + + + + + + **10**
 Inflammation, Chronic Active 2 1 1 1 1 2 1 1 1 2 **10 1.3**
 Metaplasia, Squamous 1 2 **2 1.5**
 Necrosis 4 4 4 3 1 4 4 4 4 3 **10 3.5**

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	0 3	0 6	0 5	0 5	0 5	0 6	0 4	0 3	0 4	0 5	
	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	
Regeneration	2					2					2 2.0
SPECIAL SENSES SYSTEM											
Eye	+ A + + A + + + + +										8
Cornea, Inflammation, Suppurative	1 1 1										3 1.0
Cornea, Necrosis	1 2										2 1.5
Harderian Gland	+ + + + + A + + + +										9
URINARY SYSTEM											
Kidney	+ + + + + + + + + +										10
Urinary Bladder	+ + + + + + A + + +										9

*** END OF REPORT ***

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