

**Experiment Number:** 07040 - 01

**Test Type:** 28-DAY

**Route:** GAVAGE

**Species/Strain:** RATS/HSD

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Perfluorobutane sulfonate (PFBS)

CAS Number: 375-73-5

**Date Report Requested:** 02/06/2018

**Time Report Requested:** 12:38:00

**First Dose M/F:** 01/19/12 / 01/20/12

**Lab:** BAT

PFBS\_Final 1

**NTP Study Number:** C07040

**Lock Date:** 04/25/2016

**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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Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0mg/kg/d M	DAY ON TEST ANIMAL ID												
		0 0 2 9	0 0 2 9	0 0 2 9									
		0 0 1 5 1	0 0 1 5 2	0 0 1 5 3	0 0 1 5 4	0 0 1 5 5	0 0 1 5 6	0 0 1 5 7	0 0 1 5 8	0 0 1 5 9	0 0 1 6 0		

\* TOTALS

## ALIMENTARY SYSTEM

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		2	2	2	2	2	2	2	2	2	2	2
<b>0mg/kg/d M</b>		9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID		0	0	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	1
		5	5	5	5	5	5	5	5	5	5	6
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

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

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

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0mg/kg/d M	DAY ON TEST ANIMAL ID													
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
Testes		+ + + + + + + + + + +												10
<b>HEMATOPOIETIC SYSTEM</b>														
Bone Marrow		+ + + + + + + + + + +												10
Lymph Node, Mandibular		+ + + + + + + + + + +												10
Lymph Node, Mesenteric		+ + + + + + + + + + +												10
Spleen		+ + + + + + + + + + +												10
Thymus		+ + + + + + + + + + +												10
<b>INTEGUMENTARY SYSTEM</b>														
Mammary Gland		+ + + + + + + + + + +												10
Skin		+ + + + + + + + + + +												10
<b>MUSCULOSKELETAL SYSTEM</b>														
Bone		+ + + + + + + + + + +												10
<b>NERVOUS SYSTEM</b>														
Brain		+ + + + + + + + + + +												10
<b>RESPIRATORY SYSTEM</b>														

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HARLAN SPRAGUE DAWLEY RATS MALE 0mg/kg/d M	DAY ON TEST ANIMAL ID													* TOTALS
		0 0 2 9												
Lung		+	+	+	+	+	+	+	+	+	+	+	10	
Nose		+	+	+	+	+	+	+	+	+	+	+	10	
Trachea		+	+	+	+	+	+	+	+	+	+	+	10	
<b>SPECIAL SENSES SYSTEM</b>														
Eye		+	+	+	+	+	+	+	+	+	+	+	10	
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	10	
<b>URINARY SYSTEM</b>														
Kidney		+	+	+	+	+	+	+	+	+	+	+	10	
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	10	
<b>SYSTEMIC LESIONS</b>														
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	10	

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		2	2	2	2	2	2	2	2	2	2	2
<b>62.6mg/kg/d M</b>		9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID		0	0	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	1
		6	6	6	6	6	6	6	6	6	6	7
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

### ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

NONE

### ENDOCRINE SYSTEM

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
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### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Testes	+	+	+	+	+	+	+	+	+	+	+	10
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### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

### INTEGUMENTARY SYSTEM

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE <b>62.6mg/kg/d M</b>	ANIMAL ID	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
		2	2	2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9	9	9
		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	1	1	1	1	1	1	1	1	1	1
		6	6	6	6	6	6	6	6	6	6	6	7
		1	2	3	4	5	6	7	8	9	9	9	0

\* TOTALS

NONE

### MUSCULOSKELETAL SYSTEM

NONE

### NERVOUS SYSTEM

NONE

### RESPIRATORY SYSTEM

Nose

+ + + + + + + + + +

10

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

### SYSTEMIC LESIONS

Multiple Organ

+ + + + + + + + + +

10

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

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X .. Lesion present

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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		2	2	2	2	2	2	2	2	2	2	2
<b>125mg/kg/d M</b>		9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID		0	0	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	1
		7	7	7	7	7	7	7	7	7	7	8
		1	2	3	4	5	6	7	8	9	0	
<b>* TOTALS</b>												

### ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

NONE

### ENDOCRINE SYSTEM

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
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### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Testes	+	+	+	+	+	+	+	+	+	+	+	10
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### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

### INTEGUMENTARY SYSTEM

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First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE <b>125mg/kg/d M</b>	ANIMAL ID	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
		2	2	2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9	9	9
		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	1	1	1	1	1	1	1	1	1	1
		7	7	7	7	7	7	7	7	7	7	7	8
		1	2	3	4	5	6	7	8	9	9	9	0

\* TOTALS

NONE

### MUSCULOSKELETAL SYSTEM

NONE

### NERVOUS SYSTEM

NONE

### RESPIRATORY SYSTEM

Nose

+ + + + + + + + + +

10

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

### SYSTEMIC LESIONS

Multiple Organ

+ + + + + + + + + +

10

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

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		2	2	2	2	2	2	2	2	2	2	2
<b>250mg/kg/d M</b>		9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID		0	0	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	1
		8	8	8	8	8	8	8	8	8	8	9
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

### ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

NONE
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### ENDOCRINE SYSTEM

Adrenal Cortex	+											1
Adrenal Medulla		+										1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE
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### GENITAL SYSTEM

Testes	+	+	+	+	+	+	+	+	+	+	+	10
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### HEMATOPOIETIC SYSTEM

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

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HARLAN SPRAGUE DAWLEY RATS MALE 250mg/kg/d M	ANIMAL ID	DAY ON TEST	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		
		9	9	9	9	9	9	9	9	9	9	9		
		0	0	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	1		
		8	8	8	8	8	8	8	8	8	8	9		
		1	2	3	4	5	6	7	8	9	9	0		
													* TOTALS	
Spleen													10	
Thymus													10	
<b>INTEGUMENTARY SYSTEM</b>														
NONE														
<b>MUSCULOSKELETAL SYSTEM</b>														
NONE														
<b>NERVOUS SYSTEM</b>														
NONE														
<b>RESPIRATORY SYSTEM</b>														
Nose													10	
<b>SPECIAL SENSES SYSTEM</b>														
NONE														
<b>URINARY SYSTEM</b>														
Kidney													10	
<b>SYSTEMIC LESIONS</b>														
Multiple Organ													10	

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

+ .. Tissue examined microscopically

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 500mg/kg/d M	DAY ON TEST												
		0 0 2 9	0 0 2 9	0 0 2 9									
ANIMAL ID	0 0 1 9 1	0 0 1 9 2	0 0 1 9 3	0 0 1 9 4	0 0 1 9 5	0 0 1 9 6	0 0 1 9 7	0 0 1 9 8	0 0 1 9 9	0 0 1 9 0	0 0 1 2 0		
	0 0 1 9 1	0 0 1 9 2	0 0 1 9 3	0 0 1 9 4	0 0 1 9 5	0 0 1 9 6	0 0 1 9 7	0 0 1 9 8	0 0 1 9 9	0 0 1 9 0	0 0 1 2 0	* TOTALS	

### ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	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
--------------	---	---	---	---	---	---	---	---	---	---	---	---	----

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		2	2	2	2	2	2	2	2	2	2	2
<b>500mg/kg/d M</b>		9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID		0	0	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	2
		9	9	9	9	9	9	9	9	9	9	0
		1	2	3	4	5	6	7	8	9	9	0

\* TOTALS

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

### ENDOCRINE SYSTEM

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

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	----

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	10
--------------------	---	---	---	---	---	---	---	---	---	---	---	----

Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
-------------------	---	---	---	---	---	---	---	---	---	---	---	----

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	----

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
---------------	---	---	---	---	---	---	---	---	---	---	---	----

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	10
------------	---	---	---	---	---	---	---	---	---	---	---	----

Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	----

Prostate	+	+	+	+	+	+	+	+	+	+	+	10
----------	---	---	---	---	---	---	---	---	---	---	---	----

Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	----

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 500mg/kg/d M	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	
		2	2	2	2	2	2	2	2	2	2	
		9	9	9	9	9	9	9	9	9	9	
		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	2	
		9	9	9	9	9	9	9	9	9	0	
		1	2	3	4	5	6	7	8	9	0	
		* TOTALS										
Testes		+	+	+	+	+	+	+	+	+	10	
<b>HEMATOPOIETIC SYSTEM</b>												
Bone Marrow		+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	10	
Spleen		+	+	+	+	+	+	+	+	+	10	
Thymus		+	+	+	+	+	+	+	+	+	10	
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland		+	+	+	+	+	+	+	+	+	10	
Skin		+	+	+	+	+	+	+	+	+	10	
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone		+	+	+	+	+	+	+	+	+	10	
<b>NERVOUS SYSTEM</b>												
Brain		+	+	+	+	+	+	+	+	+	10	
<b>RESPIRATORY SYSTEM</b>												

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

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Perfluorobutane sulfonate (PFBS)  
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Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 500mg/kg/d M	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
		2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9
		0	0	0	0	0	0	0	0	0	*
		0	0	0	0	0	0	0	0	0	TOTALS
		1	1	1	1	1	1	1	1	2	
		9	9	9	9	9	9	9	9	0	
		1	2	3	4	5	6	7	8	9	
Lung		+	+	+	+	+	+	+	+	+	10
Nose		+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	10
<b>SPECIAL SENSES SYSTEM</b>											
Eye		+	+	+	+	+	+	+	+	+	10
Harderian Gland		+	+	+	+	+	+	+	+	+	10
<b>URINARY SYSTEM</b>											
Kidney		+	+	+	+	+	+	+	+	+	10
Urinary Bladder		+	+	+	+	+	+	+	+	+	10
<b>SYSTEMIC LESIONS</b>											
Multiple Organ		+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
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Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/kg/d M	DAY ON TEST												
		0 0 1 5	0 0 2 8	0 0 2 5	0 1 8	0 2 5	0 1 1	0 8 7	0 0 1	0 0 6	0 0 0	0 0 0	
ANIMAL ID		0 0 2 0	0 0 2 2	0 0 2 2	0 0 0	0 0 0	0 2 0	0 2 0	0 2 0	0 0 0	0 0 0	0 0 0	
		1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 0	0 0	0 0	0 0

\* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	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
--------------	---	---	---	---	---	---	---	---	---	---	---	---	----

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

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X .. Lesion present

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Experiment Number: 07040 - 01  
 Test Type: 28-DAY  
 Route: GAVAGE  
 Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Perfluorobutane sulfonate (PFBS)  
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Date Report Requested: 02/06/2018  
 Time Report Requested: 12:38:00  
 First Dose M/F: 01/19/12 / 01/20/12  
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/kg/d M	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 1 5	8 5 4	2	2	1	2	2	1	8	7	1	0
		5	4	8	5	1	8	7	6	0	6
0 0 2 0 1	0 0 2 0 2	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
0 0 1	2 0 1	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	1	0
<b>* TOTALS</b>											

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

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

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

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Perfluorobutane sulfonate (PFBS)  
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Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/kg/d M	DAY ON TEST ANIMAL ID													* TOTALS
		0 0 1 5	0 0 2 8	0 0 2 5	0 0 1 8	0 0 2 1	0 0 8 7	0 0 1 7	0 0 0 6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
Testes		+ + + + + + + + + +												10
<b>HEMATOPOIETIC SYSTEM</b>														
Bone Marrow		+ + + + + + + + + +												10
Lymph Node, Mandibular		+ + + + + + + + + +												10
Lymph Node, Mesenteric		+ + + + + + + + + +												10
Spleen		+ + + + + + + + + +												10
Thymus		+ + + + + + + + + +												10
<b>INTEGUMENTARY SYSTEM</b>														
Mammary Gland		+ + + + + + + + + +												10
Skin		+ + + + + + + + + +												10
<b>MUSCULOSKELETAL SYSTEM</b>														
Bone		+ + + + + + + + + +												10
<b>NERVOUS SYSTEM</b>														
Brain		+ + + + + + + + + +												10
<b>RESPIRATORY SYSTEM</b>														

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0		
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0		
<b>MALE</b>		1	1	2	2	1	2	2	1	1	0		
<b>1000mg/kg/d M</b>		5	8	5	4	8	5	1	8	7	6		
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>	
Lung		0	0	0	0	0	0	0	0	0	0	10	
Nose		0	0	0	0	0	0	0	0	0	0	10	
Trachea		2	2	2	2	2	2	2	2	2	2	10	
<b>SPECIAL SENSES SYSTEM</b>		0	0	0	0	0	0	0	0	0	1		
Eye		1	2	3	4	5	6	7	8	9	0		
Harderian Gland												10	
<b>URINARY SYSTEM</b>													
Kidney		+	+	+	+	+	+	+	+	+	+	10	
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10	
<b>SYSTEMIC LESIONS</b>													
Multiple Organ		+	+	+	+	+	+	+	+	+	+	10	

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

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

M .. Missing tissue  
A .. Autolysis precludes evaluation  
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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/kg/d F	DAY ON TEST												
		0 0 2 9											
ANIMAL ID	0 0 2 1 1												
	* TOTALS												

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	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
--------------	---	---	---	---	---	---	---	---	---	---	---	---	----

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

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CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/kg/d F	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
2	2	2	2	2	2	2	2	2	2	2	2
9	9	9	9	9	9	9	9	9	9	9	9
0	0	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	2
1	1	1	1	1	1	1	1	1	1	1	2
1	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 + + + + 7

Pituitary Gland + + + + + + + + + + 10

Thyroid Gland + + + + + + + + + + 10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland + + + + + + + + + + 10

Ovary + + + + + + + + + + 10

Uterus + + + + + + + + + + 10

Vagina + + + + + + + + + + 10

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
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P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
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Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/kg/d F	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
2	2	2	2	2	2	2	2	2	2	2	2
9	9	9	9	9	9	9	9	9	9	9	9
0	0	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	2
1	1	1	1	1	1	1	1	1	1	1	2
1	2	3	4	5	6	7	8	9	0		
* TOTALS											

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

### INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	+	10

### MUSCULOSKELETAL SYSTEM

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

### NERVOUS SYSTEM

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

### RESPIRATORY SYSTEM

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

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/kg/d F	DAY ON TEST ANIMAL ID													
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		1 1 1 1	2 2 2 2	3 3 3 3	4 4 4 4	5 5 5 5	6 6 6 6	7 7 7 7	8 8 8 8	9 9 9 9	0 0 0 0			
		* TOTALS												
Nose		+ + + + + + + + + +												10
Trachea		+ + + + + + + + + +												10
<b>SPECIAL SENSES SYSTEM</b>														
Eye		+ + + + + + + + + +												10
Harderian Gland		+ + + + + + + + + +												10
<b>URINARY SYSTEM</b>														
Kidney		+ + + + + + + + + +												10
Urinary Bladder		+ + + + + + + + + +												10
<b>SYSTEMIC LESIONS</b>														
Multiple Organ		+ + + + + + + + + +												10

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
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First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	FEMALE	0	0	0	0	0	0	0	0	0	0	0
62.6mg/kg/d F	ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9	9
		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
		2	2	2	2	2	2	2	2	2	2	3
		1	2	3	4	5	6	7	8	9	0	

\* TOTALS

### ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

NONE

### ENDOCRINE SYSTEM

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
---------------	---	---	---	---	---	---	---	---	---	---	---	----

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Ovary	+	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	---	----

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

### INTEGUMENTARY SYSTEM

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

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

Experiment Number: 07040 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Perfluorobutane sulfonate (PFBS)

CAS Number: 375-73-5

Date Report Requested: 02/06/2018

Time Report Requested: 12:38:00

First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 62.6mg/kg/d F	DAY ON TEST ANIMAL ID													
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9								
		0 0 2 2 2 1	0 0 2 2 2 2	0 0 2 2 2 5	0 0 2 2 2 6	0 0 2 2 2 7	0 0 2 2 2 8	0 0 2 2 2 9	0 0 2 2 2 0					

\* TOTALS

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Nose

+ + + + + + + + + +

10

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

Kidney

+ + + + + + + + + +

10

**SYSTEMIC LESIONS**

Multiple Organ

+ + + + + + + + + +

10

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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Experiment Number: 07040 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

## P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Perfluorobutane sulfonate (PFBS)

CAS Number: 375-73-5

Date Report Requested: 02/06/2018

Time Report Requested: 12:38:00

First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 125mg/kg/d F	ANIMAL ID	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
		2	2	2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9	9	9
		0	0	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	2
		3	3	3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	9	9	0

\* TOTALS

## ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	10

## CARDIOVASCULAR SYSTEM

NONE

## ENDOCRINE SYSTEM

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	10
---------------	---	---	---	---	---	---	---	---	---	---	---	---	---	----

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Uterus														1

## HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

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CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 125mg/kg/d F	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
		2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9
		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
		3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

### INTEGUMENTARY SYSTEM

NONE

### MUSCULOSKELETAL SYSTEM

NONE

### NERVOUS SYSTEM

NONE

### RESPIRATORY SYSTEM

Nose

++ + + + + + + + +

10

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

++ + + + + + + + +

10

### SYSTEMIC LESIONS

Multiple Organ

++ + + + + + + + +

10

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

+ .. Tissue examined microscopically

X .. Lesion present

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M .. Missing tissue

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Date Report Requested: 02/06/2018  
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First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/kg/d F	DAY ON TEST														
		0 0 2 9	0 0 2 9	0 0 2 9											
ANIMAL ID	0 0 2 4 1	0 0 2 4 2	0 0 2 4 3	0 0 2 4 4	0 0 2 4 5	0 0 2 4 6	0 0 2 4 7	0 0 2 4 8	0 0 2 4 9	0 0 2 4 0	0 0 2 4 1				

\* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	1
Intestine Large, Cecum	+	1
Intestine Large, Colon	+	1
Intestine Large, Rectum	+	1
Intestine Small, Duodenum	+	1
Intestine Small, Ileum	+	1
Intestine Small, Jejunum	+	1
Liver	++ + + + + + + + +	10
Pancreas	++ + + + + + + + +	10
Salivary Glands	+	1
Stomach, Forestomach	++ + + + + + + + +	10
Stomach, Glandular	+	1

## CARDIOVASCULAR SYSTEM

Blood Vessel	+	1
--------------	---	---

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

+ .. Tissue examined microscopically

X .. Lesion present

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First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS		0	0	0	0	0	0	0	0	0	0	0
FEMALE		2	2	2	2	2	2	2	2	2	2	2
250mg/kg/d F		9	9	9	9	9	9	9	5	2	9	
ANIMAL ID		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
		4	4	4	4	4	4	4	4	4	5	
		1	2	3	4	5	6	7	8	9	0	

\* TOTALS

Heart + 1

### ENDOCRINE SYSTEM

Adrenal Cortex	+ 1
Adrenal Medulla	+ 1
Islets, Pancreatic	+ 1
Parathyroid Gland	M 0
Pituitary Gland	+ 1
Thyroid Gland	+ + + + + + + + + 10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland	+ 1
Ovary	+ + + + + + + + + 10
Uterus	+ 1
Vagina	+ 1

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 07040 - 01

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Date Report Requested: 02/06/2018

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First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/kg/d F	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
		2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	5	2	9
		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	
		4	4	4	4	4	4	4	4	5	
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular											+	1
Lymph Node, Mesenteric											+	1
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

### INTEGUMENTARY SYSTEM

Mammary Gland							+					1
Skin							+					1

### MUSCULOSKELETAL SYSTEM

Bone						+						1
------	--	--	--	--	--	---	--	--	--	--	--	---

### NERVOUS SYSTEM

Brain						+						1
-------	--	--	--	--	--	---	--	--	--	--	--	---

### RESPIRATORY SYSTEM

Lung						+						1
------	--	--	--	--	--	---	--	--	--	--	--	---

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Experiment Number: 07040 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

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CAS Number: 375-73-5

Date Report Requested: 02/06/2018

Time Report Requested: 12:38:00

First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

	DAY ON TEST													* TOTALS
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/kg/d F	ANIMAL ID	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	* TOTALS
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	
Nose		+ + + + + + + + + +												10
Trachea								+ +						1
<b>SPECIAL SENSES SYSTEM</b>														
Eye								+ +						1
Harderian Gland								+ +						1
<b>URINARY SYSTEM</b>														
Kidney		+ + + + + + + + + +												10
Urinary Bladder								+ +						1
<b>SYSTEMIC LESIONS</b>														
Multiple Organ		+ + + + + + + + + +												10

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

+ .. Tissue examined microscopically

X .. Lesion present

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First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/kg/d F	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
		2	2	2	2	2	2	2	2	2	2
		9	9	9	9	1	9	9	9	9	9
		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	
		5	5	5	5	5	5	5	5	6	
		1	2	3	4	5	6	7	8	9	
											* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	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
--------------	---	---	---	---	---	---	---	---	---	---	----

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

+ .. Tissue examined microscopically

X .. Lesion present

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 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/kg/d F	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	
		2	2	2	2	2	2	2	2	2	2	
		9	9	9	9	1	9	9	9	9	9	
		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	
		5	5	5	5	5	5	5	5	5	6	
		1	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	+	+	+	+	+	9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	+	10
Vagina	+	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

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Experiment Number: 07040 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

## P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Perfluorobutane sulfonate (PFBS)

CAS Number: 375-73-5

Date Report Requested: 02/06/2018

Time Report Requested: 12:38:00

First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/kg/d F	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
		2	2	2	2	2	2	2	2	2	2
		9	9	9	9	1	9	9	9	9	9
		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
		5	5	5	5	5	5	5	5	5	6
		1	2	3	4	5	6	7	8	9	0

\* TOTALS

## HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10

## INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	+	10

## MUSCULOSKELETAL SYSTEM

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

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

Lung	+	+	+	+	+	+	+	+	+	+	+	10
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\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 07040 - 01  
Test Type: 28-DAY  
Route: GAVAGE  
Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
Perfluorobutane sulfonate (PFBS)  
CAS Number: 375-73-5

Date Report Requested: 02/06/2018  
Time Report Requested: 12:38:00  
First Dose M/F: 01/19/12 / 01/20/12  
Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0		
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0		
<b>FEMALE</b>		2	2	2	2	2	2	2	2	2	2	2		
<b>500mg/kg/d F</b>		9	9	9	9	1	9	9	9	9	9	9		
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>	
Nose		0	0	0	0	0	0	0	0	0	0	0	10	
Trachea		2	2	2	2	2	2	2	2	2	2	2	10	
<b>SPECIAL SENSES SYSTEM</b>														
Eye		5	5	5	5	5	5	5	5	5	5	6	10	
Harderian Gland		1	2	3	4	5	6	7	8	9	9	0	10	
<b>URINARY SYSTEM</b>														
Kidney		+	+	+	+	+	+	+	+	+	+	+	10	
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	10	
<b>SYSTEMIC LESIONS</b>														
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	10	

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/kg/d F	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
		2	2	2	2	2	1	2	2	2	2
		7	2	0	9	2	6	3	1	7	
		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	
		6	6	6	6	6	6	6	6	7	
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

### ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	M	+	+	+	9
Intestine Large, Colon	+	+	+	+	+	+	M	+	+	+	9
Intestine Large, Rectum	+	+	+	+	+	+	M	+	+	+	9
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	M	+	+	+	9
Intestine Small, Jejunum	+	+	+	+	+	+	M	+	+	+	9
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/kg/d F	DAY ON TEST ANIMAL ID												
		0 0 2 7	0 0 2 2	0 0 2 9	0 0 2 9	0 0 2 2	0 0 1 6	0 0 2 3	0 0 2 1	0 0 2 7	0 0 2 7	0 0 2 7	0 0 2 7
		0 0 2 6 1	0 0 2 6 2	0 0 2 6 3	0 0 2 6 4	0 0 2 6 5	0 0 2 6 6	0 0 2 6 7	0 0 2 6 8	0 0 2 6 9	0 0 2 7	0 0 2 7	0 0 2 7

\* TOTALS

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

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

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	M	+	+	+	+	+	9
Ovary	+	+	+	+	+	+	M	+	+	+	+	+	9
Uterus	+	+	+	+	+	+	M	+	+	+	+	+	9
Vagina	+	+	+	+	+	+	M	+	+	+	+	+	9

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First Dose M/F: 01/19/12 / 01/20/12

Lab: BAT

DAY ON TEST												
	0 0 2 7	0 0 2 2	0 0 2 0	0 0 2 9	0 0 2 9	0 0 2 2	0 1 6	0 2 3	0 2 1	0 2 7	0 0 2 7	
HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/kg/d F	ANIMAL ID											
	0 0 2 6											
	1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 0			

\* TOTALS

## HEMATOPOIETIC SYSTEM

Bone Marrow	+++ + + + + + + + + +	10
Lymph Node, Mandibular	+++ + + + + + + + + +	10
Lymph Node, Mesenteric	+++ + + + + + M + + +	9
Spleen	+++ + + + + + + + + +	10
Thymus	+++ + + + + + + + + +	10

## INTEGUMENTARY SYSTEM

Mammary Gland	+++ + + + + + + + + +	10
Skin	+++ + + + + + + + + +	10

## MUSCULOSKELETAL SYSTEM

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

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

## RESPIRATORY SYSTEM

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

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HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/kg/d F	DAY ON TEST ANIMAL ID													* TOTALS
		0 0 2 7	0 0 2 2	0 0 2 9	0 0 2 9	0 0 2 2	0 0 1 6	0 0 2 3	0 0 2 1	0 0 2 7	0 0 2 7	0 0 2 7	0 0 2 7	
Nose		+	+	+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	10
<b>SPECIAL SENSES SYSTEM</b>														
Eye		+	+	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	10
<b>URINARY SYSTEM</b>														
Kidney		+	+	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder		+	+	+	+	+	+	M	+	+	+	+	+	9
<b>SYSTEMIC LESIONS</b>														
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	+	10

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

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