

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

PFNA_Final 1

NTP Study Number: C04049
Lock Date: 01/22/2016
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

Note: Animals arranged according to days on test.

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Lab: BAT

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

ALIMENTARY SYSTEM

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
Heart	+	+	+	+	+	+	+	+	+	+	10

* .. 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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Lab: BAT

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

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	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
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
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Lab: BAT

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			
HARLAN SPRAGUE DAWLEY RATS	2	2	2	2	2	2	2	2	2	2			
MALE	9	9	9	9	9	9	9	9	9	9			
0 mg/kg/d M	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			
	0	0	0	0	0	0	0	0	0	1			
	1	2	3	4	5	6	7	8	9	0			* TOTALS
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
Nose	+	+	+	+	+	+	+	+	+	+			10
Trachea	+	+	+	+	+	+	+	+	+	+			10
SPECIAL SENSES SYSTEM													

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Lab: BAT

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

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	
0.625mg/kg/d M	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	
	1	1	1	1	1	1	1	1	1	2	
	1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

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

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

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

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10

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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	
HARLAN SPRAGUE DAWLEY RATS	2	2	2	2	2	2	2	2	2	2	
MALE	9	9	9	9	9	9	9	9	9	9	
0.625mg/kg/d M	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	
	1	1	1	1	1	1	1	1	1	2	
	1	2	3	4	5	6	7	8	9	0	
* TOTALS											

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

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Nose	+	+	+	+	+	+	+	+	+	+	10
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SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
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SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	10
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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS MALE		0	0	0	0	0	0	0	0	0	0
	1.25 mg/kg/d M	2	2	2	2	2	2	2	2	2	2
ANIMAL ID		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
		7	7	7	7	7	7	7	7	7	7
		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
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

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

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10

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Lab: BAT

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

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

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Nose	+	+	+	+	+	+	+	+	+	+	10
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SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
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SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	-----------

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 2.5 mg/kg/d M	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	
ANIMAL ID	0 7 3 1	0 7 3 2	0 7 3 3	0 7 3 4	0 7 3 5	0 7 3 6	0 7 3 7	0 7 3 8	0 7 3 9	0 7 3 0	

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
Heart	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with tumor
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Lab: BAT

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

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	M	M	+	+	M	+	+	+	+	+	7
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

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

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 X .. Lesion present
 I .. Insufficient tissue

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

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 2.5 mg/kg/d M	DAY ON TEST										* TOTALS
	009	009	009	009	009	009	009	009	009	009	
ANIMAL ID	00731	00732	00733	00734	00735	00736	00737	00738	00739	00740	
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
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES 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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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			
HARLAN SPRAGUE DAWLEY RATS	2	2	2	2	2	2	2	2	2	2			
MALE	9	9	9	9	9	9	9	9	9	9			
2.5 mg/kg/d M	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			
	3	3	3	3	3	3	3	3	3	4			
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Eye	+	+	+	+	+	+	+	+	+	+			10
Harderian Gland	+	+	+	+	+	+	+	+	+	+			10
URINARY SYSTEM													
Kidney	+	+	+	+	+	+	+	+	+	+			10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+			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
 BLANK .. Not examined microscopically

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

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Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	M	+	+	+	9
Intestine Large, Colon	M	+	+	+	+	+	M	+	+	+	8
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	M	+	+	+	+	+	M	+	+	+	8
Intestine Small, Ileum	+	+	+	+	+	+	M	+	+	+	9
Intestine Small, Jejunum	+	+	+	+	+	+	M	+	+	+	9
Liver	+	+	+	+	+	+	M	+	+	+	9
Pancreas	M	+	+	+	+	+	M	+	+	+	8
Salivary Glands	+	+	+	+	M	+	+	+	+	+	9
Stomach, Forestomach	M	+	+	+	+	+	M	+	+	+	8
Stomach, Glandular	+	+	+	+	+	+	M	+	+	+	9

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	M	+	+	+	+	+	+	+	+	+	9
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	M	+	+	+	+	+	+	+	+	+	9

HEMATOPOIETIC SYSTEM

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

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
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Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 5 mg/kg/d M	DAY ON TEST										* TOTALS
	0 2 4	0 2 4	0 2 4	0 2 4	0 2 5	0 2 5	0 2 5	0 2 6	0 2 9	0 2 9	
ANIMAL ID	0 7 4 1	0 7 4 3	0 7 4 5	0 7 4 0	0 7 4 2	0 7 4 6	0 7 4 8	0 7 4 9	0 7 4 4	0 7 4 7	
Lymph Node, Mandibular	+	M	+	M	M	+	+	+	+	+	7
Lymph Node, Mesenteric	M	+	+	+	+	+	M	+	+	+	8
Spleen	M	+	+	+	+	+	M	+	+	+	8
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
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Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

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Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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			
HARLAN SPRAGUE DAWLEY RATS	2	2	2	2	2	2	2	2	2	2			
MALE	4	4	4	4	5	5	5	6	9	9			
5 mg/kg/d M	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			
	4	4	4	5	4	4	4	4	4	4			
	1	3	5	0	2	6	8	9	4	7			* TOTALS
Eye	+	+	+	+	+	+	+	+	+	+			10
Harderian Gland	+	+	+	+	+	+	+	+	+	+			10
URINARY SYSTEM													
Kidney	+	+	+	+	+	+	+	+	+	+			10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+			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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

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Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS MALE	1	1	1	1	1	1	1	1	1
10 mg/kg/d M	5	5	6	6	7	7	7	7	7	8
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7
	5	5	5	6	5	5	5	5	5	5
	1	3	6	0	2	4	5	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
Heart	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	M	+	+	+	9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

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

* .. 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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
HARLAN SPRAGUE DAWLEY RATS MALE	5	5	6	6	7	7	7	7	7	8	
	0	0	0	0	0	0	0	0	0	0	
10 mg/kg/d M	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	5	5	5	6	5	5	5	5	5	5	
	1	3	6	0	2	4	5	7	8	9	
* TOTALS											
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	M	M	+	+	+	+	+	8
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											

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

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 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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			
HARLAN SPRAGUE DAWLEY RATS	1	1	1	1	1	1	1	1	1	1			
MALE	5	5	6	6	7	7	7	7	7	8			
10 mg/kg/d M	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			
	5	5	5	6	5	5	5	5	5	5			
	1	3	6	0	2	4	5	7	8	9			* TOTALS
Eye	+	+	+	+	+	+	+	+	+	+			10
Harderian Gland	+	+	+	+	+	+	+	+	+	+			10
URINARY SYSTEM													
Kidney	+	+	+	+	+	+	+	+	+	+			10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+			10
SYSTEMIC LESIONS													
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
BLANK .. Not examined microscopically

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	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 mg/kg/d F	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	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
	7	7	7	7	7	7	7	7	7	7
	6	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	+	+	+	+	+	+	+	+	+	+	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
Heart	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	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 mg/kg/d F	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	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
	7	7	7	7	7	7	7	7	7	7
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ENDOCRINE SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0 mg/kg/d F	DAY ON TEST										* TOTALS
	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	0 2 9	
ANIMAL ID	0 7 6 1	0 7 6 2	0 7 6 3	0 7 6 4	0 7 6 5	0 7 6 6	0 7 6 7	0 7 6 8	0 7 6 9	0 7 6 0	
	Spleen	+	+	+	+	+	+	+	+	+	+
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	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
BLANK .. Not examined microscopically

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0
1.56mg/kg/d F	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	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
	7	7	7	7	7	7	7	7	7	7
	7	7	7	7	7	7	7	7	7	8
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ALIMENTARY SYSTEM

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

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

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			
HARLAN SPRAGUE DAWLEY RATS	2	2	2	2	2	2	2	2	2	2			
FEMALE	9	9	9	9	9	9	9	9	9	9			
1.56mg/kg/d F	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	7	7	7	7	7	8			
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Spleen	+	+	+	+	+	+	+	+	+	+			10
Thymus	+	+	+	+	+	+	+	+	+	+			10
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
 I .. Insufficient tissue

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

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 3.12mg/kg/d F	DAY ON TEST	0	0	0	0	0	0	0	0	0	* TOTALS
		0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	2	2	2	2	
		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	
		7	7	7	7	7	7	7	7	7	
		8	8	8	8	8	8	8	8	9	
		1	2	3	4	5	6	7	8	9	
		0	0	0	0	0	0	0	0	0	

ALIMENTARY SYSTEM

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

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 3.12mg/kg/d F	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	
		2	2	2	2	2	2	2	2	2	2	
		9	9	9	9	9	9	9	9	9	9	
		7	7	7	7	7	7	7	7	7	7	
		8	8	8	8	8	8	8	8	8	9	
		1	2	3	4	5	6	7	8	9	0	
Spleen		+	+	+	+	+	+	+	+	+	+	10
Thymus		+	+	+	+	+	+	+	+	+	+	10
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
I .. Insufficient tissue

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

Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0
6.25mg/kg/d F	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	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
	7	7	7	7	7	7	7	7	8	8
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	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
Heart	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 6.25mg/kg/d F	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
		1	2	3	4	5	6	7	8	9	0	0	0	0	0	0	0	0	0
* TOTALS																			

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	9
Pituitary Gland	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 6.25mg/kg/d F	DAY ON TEST										* TOTALS
	0029	0029	0029	0029	0029	0029	0029	0029	0029	0029	
ANIMAL ID	00791	00792	00793	00794	00795	00796	00797	00798	00799	00800	
	Spleen	+	+	+	+	+	+	+	+	+	+
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 6.25mg/kg/d F	DAY ON TEST	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
		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
		7	7	7	7	7	7	7	7	8
		9	9	9	9	9	9	9	9	0
		1	2	3	4	5	6	7	8	9

* TOTALS

URINARY SYSTEM

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

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+
----------------	---	---	---	---	---	---	---	---	---	---

* .. 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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 12.5mg/kg/d F	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
		1	1	1	1	1	1	2	2	2	2	2	2	2	2
		3	5	5	5	6	7	5	7	7	7	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	0	0	0	0	0	0
		8	8	8	8	8	8	8	8	8	8	8	8	8	8
		0	0	0	0	0	0	0	0	0	0	1	0	0	0
		5	1	2	3	8	4	9	6	0	7				
* TOTALS															

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	M	+	+	+	+	+	+	+	+	+	+	+	+	9
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
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	1	1	1	1	1	1	2	2	2
12.5mg/kg/d F	3	5	5	5	6	7	5	7	7	9
ANIMAL ID	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	1	0
	5	1	2	3	8	4	9	6	0	7
* TOTALS										

ENDOCRINE SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	M	+	M	+	+	+	+	8
Lymph Node, Mesenteric	+	M	+	+	+	+	+	+	+	+	9

* .. 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: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 12.5mg/kg/d F	DAY ON TEST										* TOTALS
	0 0 1 3	0 0 1 5	0 0 1 5	0 0 1 5	0 0 1 6	0 0 1 7	0 0 2 5	0 0 2 7	0 0 2 7	0 0 2 9	
	ANIMAL ID										
	0 8 0 5	0 8 0 1	0 8 0 2	0 8 0 3	0 8 0 8	0 8 0 4	0 8 0 9	0 8 0 6	0 8 1 0	0 8 0 7	
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
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Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 12.5mg/kg/d F	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	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
		3	5	5	5	6	7	5	7	7	7	7	7	7	7	7	7	7	7
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
		5	1	2	3	8	4	9	6	0	7	0	7	0	7	0	7	0	7
* TOTALS																			

URINARY SYSTEM

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

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
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* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
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Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

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Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

DAY ON TEST		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
		1	1	1	1	1	1	1	1	1	1
		1	2	2	2	2	2	2	4	5	
	25mg/kg/d F										
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	
		1	1	1	1	1	1	1	2	1	
		4	1	2	3	5	6	8	9	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
Heart	+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
X .. Lesion present
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Experiment Number: 04049 - 01

Test Type: 28-DAY

Route: GAVAGE

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 25mg/kg/d F	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
		1	2	2	2	2	2	2	2	4	5				
		8	8	8	8	8	8	8	8	8	8	8	8	8	8
		1	1	1	1	1	1	1	1	2	1				
		4	1	2	3	5	6	8	9	0	7				
* TOTALS															

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+					10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+					10
Parathyroid Gland	+	+	+	+	+	M	+	+	+	M					8
Pituitary Gland	+	+	+	+	+	+	+	+	+	+					10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+					10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

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

* .. Total animals with tissue examined microscopically; Total animals with tumor
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Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 25mg/kg/d F	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	
		1	1	1	1	1	1	1	1	1	1	
		1	2	2	2	2	2	2	2	4	5	
		8	8	8	8	8	8	8	8	8	8	
		1	1	1	1	1	1	1	1	2	1	
		4	1	2	3	5	6	8	9	0	7	
Spleen		+	+	+	+	+	+	+	+	+	+	10
Thymus		+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM												
Mammary Gland		+	+	+	+	+	+	+	+	+	+	10
Skin		+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM												
Bone		+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM												
Brain		+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM												
Lung		+	+	+	+	+	+	+	+	+	+	10
Nose		+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM												
Eye		+	+	+	+	+	+	+	+	+	+	10
Harderian Gland		+	+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with tumor
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Species/Strain: RATS/HSD

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Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 02/06/2018

Time Report Requested: 12:36:11

First Dose M/F: 02/02/12 / 02/03/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 25mg/kg/d F	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	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	2	2	2	2	2	2	2	2	4	5								
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
		1	1	1	1	1	1	1	1	1	1	1	2	1						
		4	1	2	3	5	6	8	9	0	7									
* TOTALS																				

URINARY SYSTEM

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

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
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