Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

Final 1_16-Week SSAC Only

NTP Study Number: C20614B

Lock Date: 01/10/2012

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25017 SSAC

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Male

TDMSE Version: 3.0.2.3_002

PWG Approval Date: 07/24/2018

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8										
0/0 ppm ANIMAL ID	0 0 0 5 1	0 0 0 5 2	0 0 0 5 3	0 0 0 5 4	0 0 0 5 5	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	0 0 0 6 0	
ALIMENTARY SYSTEM											
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
CARDIOVASCULAR SYSTEM											
NONE											
ENDOCRINE SYSTEM											
NONE											
GENERAL BODY SYSTEM											
NONE				_							
GENITAL SYSTEM											
NONE											
HEMATOPOIETIC SYSTEM											
NONE											
INTEGUMENTARY SYSTEM											
NONE											

MUSCULOSKELETAL SYSTEM

NONE

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

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

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + +

10

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

Test Type: CHRONIC Route: DOSED FEED

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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	1 0	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	
300/0 ppm ANIMAL ID	0 0 1 1 1	0 0 1 1 2	0 0 1 1 3	0 0 1 1 4	0 0 1 1 5	0 1 1	0 0 1 1 7	0 0 1 1 8	0 0 1 1 9	0 0 1 2 0	 * TOTA
ALIMENTARY SYSTEM						•		•	•	•	
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I.. Insufficient tissue

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

10

Lab: BAT

NERVOUS SYSTEM NONE												
300/0 ppm	ANIMAL ID	0 0 1 1 1	0 0 1 1 2	0 0 1 1 3	0 0 1 1 4	0 0 1 1 5	0 0 1 1 6	0 0 1 1 7	0 0 1 1 8	0 0 1 1 9	0 0 1 2 0	* TOTALS
HARLAN SPRAGUE D MALE	DAY ON TEST DAWLEY RATS	0 1 0 8										

SPECIAL SENSES SYSTEM

NONE

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + +

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST RLAN SPRAGUE DAWLEY RATS	0 1 0 8	0 1 0 8	0 1 0 8	1 0	1	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8
) ppm ANIMAL ID	0 0 1 7 1	0 0 1 7 2	0 0 1 7 3	0 0 1 7 4) 1 7	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS 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

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: DOSED FEED

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8										
0/20 ppm ANIMAL ID	0 0 1 7 1	0 0 1 7 2	0 0 1 7 3	0 0 1 7 4	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0	* TOTALS

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8) (
0/20 ppm ANIMAL ID	0 0 2 3 1	0 0 2 3 2	0 0 2 3 3	0 0 2 3 4	0 0 2 3 5	0 0 2 3 6	0 0 2 3 7	0 0 2 3 8	0 0 2 3 9) (

10 Liver

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS 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

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

10

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
	8	8	8	8	8	8	8	8	8	8
300/20 ppm 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
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + +

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I.. Insufficient tissue

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

ALIMENTARY SYSTEM											10
0/40 ppm ANIMAL ID	0 0 2 9 1	0 0 2 9 2	0 0 2 9 3	0 0 2 9 4	0 0 2 9 5	0 0 2 9 6	0 0 2 9 7	0 0 2 9 8	0 0 2 9 9	0 0 3 0 0	* TOTAL
DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8										

Liver

10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS 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

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: DOSED FEED

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

10

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8	0 1 0 8	0 1 0 8								
0/40 ppm ANIMAL ID	0 0 2 9 1	0 0 2 9 2	0 0 2 9 3	0 0 2 9 4	0 0 2 9 5	0 0 2 9 6	0 0 2 9 7	0 0 2 9 8	0 0 2 9	0 0 3 0 0	* TOTALS

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + +

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

X .. Lesion present

I.. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

^{+ ..} Tissue examined microscopically

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8										
300/40 ppm ANIMAL ID	0 0 3 5 1	0 0 3 5 2	0 0 3 5 3	0 0 3 5 4	0 0 3 5 5	0 0 3 5 6	0 0 3 5 7	0 0 3 5 8	0 0 3 5 9	0 0 3 6 0	* TOTALS

ALIMENTARY SYSTEM

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS 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

Test Type: CHRONIC

Species/Strain: RATS/HSD

Route: DOSED FEED

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

10

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8										
300/40 ppm ANIMAL ID	0 0 3 5 1	0 0 3 5 2	0 0 3 5 3	0 0 3 5 4	0 0 3 5 5	0 0 3 5 6	0 0 3 5 7	0 0 3 5 8	0 0 3 5 9	0 0 3 6 0	* TOTALS
NONE RESPIRATORY SYSTEM		-					-				

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I.. Insufficient tissue

A .. Autolysis precludes evaluation

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid CAS Number: 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATMALE	'	1	0 1 0 8	0 1 0 8	0 1 0 8	1	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	
0/80 ppm ANIMAL	ID 0 4 1 1	0	0 0 4 1 3	0 0 4 1 4	0 0 4 1 5	0 4 1	0 0 4 1 7	0 0 4 1 8	0 0 4 1 9	0 0 4 2 0	* TOTALS
ALIMENTARY SYSTEM											40
Liver Pancreas	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I.. Insufficient tissue

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	0 1 0 8	
0/80 ppm ANIMAL ID	0 0 4 1	0 0 4 1 2	0 0 4 1 3	0 0 4 1 4	0 0 4 1 5	0 0 4 1 6	0 0 4 1 7	0 0 4 1 8	0 0 4 1 9	0 0 4 2 0	* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + + + + +

10

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Test Type: CHRONIC Route: DOSED FEED

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Perfluorooctanoic Acid **CAS Number:** 335-67-1

Date Report Requested: 07/24/2018 Time Report Requested: 13:12:17 First Dose M/F: 07/27/09 / NA

Lab: BAT

HARLAN SPRAGUE DAV	DAY ON TEST	0 1 0 8										
300/80 ppm	ANIMAL ID	0 0 4 7 1	0 0 4 7 2	0 0 4 7 3	0 0 4 7 4	0 0 4 7 5	0 0 4 7 6	0 0 4 7 7	0 0 4 7 8	0 0 4 7 9	0 0 4 8 0	* TOTALS
ALIMENTARY SYSTEM												
Liver		+	+	+	+	+	+	+	+	+	+	10
Pancreas		+	+	+	+	+	+	+	+	+	+	10
CARDIOVASCULAR SYS	TEM											
NONE					_							
ENDOCRINE SYSTEM												
NONE												
GENERAL BODY SYSTE	M											
NONE							_					
GENITAL SYSTEM												
NONE					-	-	-					
HEMATOPOIETIC SYSTE	M											
NONE												
INTEGUMENTARY SYST	EM											

MUSCULOSKELETAL SYSTEM

NONE

NONE

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Experiment Number: 20614 - 02 P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Date Report Requested: 07/24/2018 **Test Type: CHRONIC** Time Report Requested: 13:12:17 Perfluorooctanoic Acid Route: DOSED FEED First Dose M/F: 07/27/09 / NA **CAS Number:** 335-67-1 Species/Strain: RATS/HSD Lab: BAT 1 DAY ON TEST Ĭ HARLAN SPRAGUE DAWLEY RATS MALE 300/80 ppm ANIMAL ID 7 1 7 7 7 7 7 * TOTALS **NERVOUS SYSTEM** NONE RESPIRATORY SYSTEM NONE **SPECIAL SENSES SYSTEM**

*** END OF REPORT ***

NONE

NONE

URINARY SYSTEM

SYSTEMIC LESIONS

Multiple Organ

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I.. Insufficient tissue

A .. Autolysis precludes evaluation