

**Experiment Number:** C04049

**Test Type:** TOX

**Route:** Oral Gavage

**Species/Strain:** Rat/Harlan Sprague Dawley

**C Number:**

C04049

**Cage Range:**

All

**Date Range:**

All

**Reasons For Removal:**

All

**Removal Date Range:**

All

**Treatment Groups:**

All

**Study Gender:**

Female

**PA41: Clinical Chemistry Summary**

**Test Compound:** Perfluorononanoic Acid

**CAS Number:** 375-95-1

**Date Report Requested:** 04/04/2018

**Time Report Requested:** 13:56:19

**Lab:** Battelle

Experiment Number: C04049

Test Type: TOX

Route: Oral Gavage

Species/Strain: Rat/Harlan Sprague Dawley

PA41: Clinical Chemistry Summary

Test Compound: Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 04/04/2018

Time Report Requested: 13:56:19

Lab: Battelle

## Female

	Phase Day	Treatment Groups (mg/kg/day)												
		0		1.56		3.12		6.25		12.5				
Urea Nitrogen (mg/dL)	SD 28	17.2	± 1.0	(10) **	18.1	± 0.5	(10)	21.3	± 0.8	(10) **	22.1	± 1.4	(10) **	29.0 (1)
Percent of Control					105.2			123.8			128.5			168.6
Creatinine (mg/dL)	SD 28	0.77	± 0.02	(10)	0.78	± 0.01	(10)	0.77	± 0.02	(10)	0.80	± 0.01	(10)	0.70 (1)
Percent of Control					101.30			100.00			103.90			90.91
Glucose (mg/dL)	SD 28	215.7	± 11.5	(10)	193.1	± 13.6	(10)	185.2	± 12.4	(10)	186.2	± 9.5	(10)	115.0 (1)
Percent of Control					89.5			85.9			86.3			53.3
Total Protein (g/dL)	SD 28	6.28	± 0.07	(10) **	6.55	± 0.09	(10) *	6.66	± 0.07	(10) **	6.67	± 0.08	(10) **	5.90 (1)
Percent of Control					104.30			106.05			106.21			93.95
Globulin (g/dL)	SD 28	1.88	± 0.06	(10) **	1.64	± 0.06	(10) *	1.59	± 0.06	(10) **	1.48	± 0.02	(10) **	1.50 (1)
Percent of Control					87.23			84.57			78.72			79.79
A/G Ratio	SD 28	2.37	± 0.10	(10) **	3.03	± 0.13	(10) **	3.24	± 0.14	(10) **	3.51	± 0.07	(10) **	2.93 (1)
Percent of Control					128.06			136.72			148.38			123.83
Albumin (g/dL)	SD 28	4.40	± 0.07	(10) **	4.91	± 0.07	(10) **	5.07	± 0.05	(10) **	5.19	± 0.07	(10) **	4.40 (1)
Percent of Control					111.59			115.23			117.95			100.00
Total Bilirubin (mg/dL)	SD 28	0.119	± 0.005	(10) **	0.111	± 0.003	(10)	0.125	± 0.001	(10)	0.133	± 0.006	(10)	0.134 (1)
Percent of Control					93.199			104.534			111.251			112.510
Direct Bilirubin (mg/dL)	SD 28	0.024	± 0.001	(10) *	0.026	± 0.002	(10)	0.027	± 0.002	(10)	0.032	± 0.003	(10) *	0.033 (1)
Percent of Control					110.042			112.552			132.636			138.075
Indirect Bilirubin (mg/dL)	SD 28	0.095	± 0.006	(10) *	0.085	± 0.004	(10)	0.098	± 0.003	(10)	0.101	± 0.004	(10)	0.101 (1)
Percent of Control					88.971			102.521			105.882			106.092
Cholesterol (mg/dL)	SD 28	99.3	± 4.0	(10)	87.8	± 2.8	(10)	98.0	± 3.8	(10)	104.1	± 2.9	(10)	121.0 (1)
Percent of Control					88.4			98.7			104.8			121.9

Experiment Number: C04049

Test Type: TOX

Route: Oral Gavage

Species/Strain: Rat/Harlan Sprague Dawley

PA41: Clinical Chemistry Summary

Test Compound: Perfluorononanoic Acid

CAS Number: 375-95-1

Date Report Requested: 04/04/2018

Time Report Requested: 13:56:19

Lab: Battelle

Female

	Phase Day	Treatment Groups (mg/kg/day)													
		0			1.56			3.12			6.25			12.5	
Triglyceride (mg/dL)	SD 28	61.5	± 5.8	(10)	65.3	± 5.2	(10)	81.7	± 8.1	(10)	64.2	± 5.4	(10)	44.0	(1)
Percent of Control					106.2			132.8			104.4			71.5	
Alanine Aminotransferase (IU/L)	SD 28	44.90	± 2.84	(10) **	46.80	± 1.28	(10)	52.90	± 1.28	(10) **	58.70	± 3.11	(10) **	58.00	(1)
Percent of Control					104.23			117.82			130.73			129.18	
Alkaline Phosphatase (IU/L)	SD 28	143.7	± 6.6	(10) **	159.1	± 4.6	(10)	183.3	± 7.7	(10) **	198.5	± 12.5	(10) **	308.0	(1)
Percent of Control					110.7			127.6			138.1			214.3	
Aspartate Aminotransferase (U/L)	SD 28	59.70	± 1.20	(10)	56.70	± 1.04	(10)	57.60	± 1.18	(10)	66.70	± 2.18	(10)	54.00	(1)
Percent of Control					94.97			96.48			111.73			90.45	
Creatine Kinase (IU/L)	SD 28	90.4	± 4.1	(10)	90.2	± 5.5	(10)	83.5	± 3.2	(10)	90.2	± 5.8	(10)	88.0	(1)
Percent of Control					99.8			92.4			99.8			97.3	
Sorbitol Dehydrogenase (IU/L)	SD 28	6.5	± 0.5	(10) **	8.7	± 0.6	(10) *	9.2	± 0.7	(10) **	10.3	± 1.3	(10) **	9.0	(1)
Percent of Control					133.8			141.5			158.5			138.5	
Bile salt/acids (umol/L)	SD 28	9.9	± 2.1	(10) **	15.1	± 2.4	(10)	21.1	± 1.5	(10) **	28.0	± 4.5	(10) **	67.0	(1)
Percent of Control					152.5			213.1			282.8			676.8	

**Experiment Number:** C04049

**Test Type:** TOX

**Route:** Oral Gavage

**Species/Strain:** Rat/Harlan Sprague Dawley

**PA41: Clinical Chemistry Summary**

**Test Compound:** Perfluorononanoic Acid

**CAS Number:** 375-95-1

**Date Report Requested:** 04/04/2018

**Time Report Requested:** 13:56:19

**Lab:** Battelle

## LEGEND

---

Values given as mean  $\pm$  SEM (N) with Percent of Control calculated by (dosed group mean / control group mean) x 100

SD – Study Day; GD – Gestation Day; LD – Lactation Day; PND – Postnatal Day, adults post-weaning

Clinical Chemistry for gestation phase includes pregnant females only

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests (unless otherwise noted).

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

Indirect Bilirubin calculated as Total Bilirubin - Direct Bilirubin.

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