

**Study Number:** 108020004  
**Test Type:** 5-Day Toxicity  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Rat/Harlan Sprague Dawley

**PA41: Clinical Chemistry Summary**  
**Test Compound:** 1,4-Dichlorobenzene  
**CAS Number:** 106-46-7

**Date Report Requested:** 09/26/2025  
**Time Report Requested:** 14:06:17  
**Lab:** Battelle

**Study Number:** 108020004  
**Study Sex:** Female  
**PWG Approval Date:** See web page for date of PWG Approval  
**Version:** v1.7.2-6-ge85fa364  
**Stat Version:** 2023.02.27S

Study Number: 108020004

Test Type: 5-Day Toxicity

Route: Whole-Body Inhalation

Species/Strain: Rat/Harlan Sprague Dawley

PA41: Clinical Chemistry Summary

Test Compound: 1,4-Dichlorobenzene

CAS Number: 106-46-7

Date Report Requested: 09/26/2025

Time Report Requested: 14:06:17

Lab: Battelle

Female: Core Animals

	Phase Day	Treatment Groups (ppm)				
		0	1	10	50	150
Urea Nitrogen (mg/dL)	SD 5	17.3 ± 0.5 (10)	17.0 ± 1.0 (5)	17.8 ± 0.9 (5)	17.0 ± 1.1 (5)	19.4 ± 0.6 (5)
Percent of Control			98.3	102.9	98.3	112.1
Creatinine (mg/dL)	SD 5	0.44 ± 0.02 (10) *	0.46 ± 0.02 (5)	0.42 ± 0.02 (5)	0.44 ± 0.02 (5)	0.44 ± 0.02 (5)
Percent of Control			104.5	95.5	100.0	100.0
Glucose (mg/dL)	SD 5	129.0 ± 5.6 (10)	154.0 ± 17.6 (5)	128.8 ± 5.2 (5)	131.6 ± 5.3 (5)	147.8 ± 13.1 (5)
Percent of Control			119.4	99.8	102.0	114.6
Total Protein (g/dL)	SD 5	6.39 ± 0.09 (10)	6.34 ± 0.11 (5)	6.44 ± 0.10 (5)	6.62 ± 0.08 (5)	6.58 ± 0.13 (5)
Percent of Control			99.2	100.8	103.6	103.0
Globulin (g/dL)	SD 5	1.35 ± 0.07 (10)	1.46 ± 0.04 (5)	1.44 ± 0.07 (5)	1.50 ± 0.07 (5)	1.38 ± 0.06 (5)
Percent of Control			108.1	106.7	111.1	102.2
A/G Ratio	SD 5	3.85 ± 0.24 (10)	3.35 ± 0.06 (5)	3.51 ± 0.17 (5)	3.44 ± 0.16 (5)	3.80 ± 0.19 (5)
Percent of Control			87.0	91.1	89.4	98.6
Albumin (g/dL)	SD 5	5.04 ± 0.05 (10)	4.88 ± 0.08 (5)	5.00 ± 0.07 (5)	5.12 ± 0.02 (5)	5.20 ± 0.11 (5)
Percent of Control			96.8	99.2	101.6	103.2
Cholesterol (mg/dL)	SD 5	91.7 ± 4.2 (10) **	92.4 ± 2.2 (5)	96.0 ± 6.5 (5)	99.0 ± 8.1 (5)	105.2 ± 4.3 (5)
Percent of Control			100.8	104.7	108.0	114.7
Triglyceride (mg/dL)	SD 5	54.9 ± 3.6 (10) **	75.6 ± 5.2 (5)	69.0 ± 7.1 (5)	73.6 ± 9.4 (5)	62.2 ± 8.1 (5)
Percent of Control			137.7	125.7	134.1	113.3
Alanine Aminotransferase (IU/L)	SD 5	45.1 ± 1.8 (10)	48.8 ± 1.7 (5)	45.6 ± 1.0 (5)	44.2 ± 1.5 (5)	46.6 ± 0.5 (5)
Percent of Control			108.2	101.1	98.0	103.3
Alkaline Phosphatase (IU/L)	SD 5	259.8 ± 10.7 (10)	240.8 ± 8.5 (5)	256.4 ± 29.5 (5)	248.2 ± 15.1 (5)	225.8 ± 18.8 (5)
Percent of Control			92.7	98.7	95.5	86.9

Study Number: 108020004

Test Type: 5-Day Toxicity

Route: Whole-Body Inhalation

Species/Strain: Rat/Harlan Sprague Dawley

PA41: Clinical Chemistry Summary

Test Compound: 1,4-Dichlorobenzene

CAS Number: 106-46-7

Date Report Requested: 09/26/2025

Time Report Requested: 14:06:17

Lab: Battelle

Female: Core Animals

	Phase Day	Treatment Groups (ppm)				
		0	1	10	50	150
Aspartate Aminotransferase (U/L) Percent of Control	SD 5	85.89 ± 2.94 (9) *	103.40 ± 12.64 (5) 120.4	79.20 ± 1.93 (5) 92.2	82.40 ± 6.98 (5) 95.9	116.40 ± 30.34 (5) 135.5
Creatine Kinase (IU/L) Percent of Control	SD 5	480.3 ± 77.6 (9)	1150.8 ± 432.7 (5) 239.6	283.2 ± 38.9 (5) 59.0	434.0 ± 240.7 (5) 90.4	354.3 ± 39.0 (4) 73.8
Sorbitol Dehydrogenase (IU/L) Percent of Control	SD 5	10.2 ± 0.6 (10) *	13.1 ± 3.1 (5) 128.5	9.7 ± 0.6 (5) 95.0	9.4 ± 1.3 (5) 92.1	10.6 ± 2.6 (5) 103.4
Bile salt/acids (µmol/L) Percent of Control	SD 5	4.8 ± 0.3 (10)	6.2 ± 1.2 (5) 129.2	4.0 ± 0.3 (5) 83.3	4.0 ± 0.0 (5) 83.3	5.2 ± 0.5 (5) 108.3

**Study Number:** 108020004

**Test Type:** 5-Day Toxicity

**Route:** Whole-Body Inhalation

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

**PA41: Clinical Chemistry Summary**

**Test Compound:** 1,4-Dichlorobenzene

**CAS Number:** 106-46-7

**Date Report Requested:** 09/26/2025

**Time Report Requested:** 14:06:17

**Lab:** Battelle

---

**Female: Core Animals**

---

	Phase Day	Treatment Groups (ppm)	
		400	800
Urea Nitrogen (mg/dL)	SD 5	15.8 ± 1.5 (5)	13.6 ± 0.5 (5) *
Percent of Control		91.3	78.6
Creatinine (mg/dL)	SD 5	0.40 ± 0.00 (5)	0.38 ± 0.02 (5)
Percent of Control		90.9	86.4
Glucose (mg/dL)	SD 5	129.2 ± 2.4 (5)	129.0 ± 7.1 (5)
Percent of Control		100.2	100.0
Total Protein (g/dL)	SD 5	6.58 ± 0.12 (5)	6.48 ± 0.12 (5)
Percent of Control		103.0	101.4
Globulin (g/dL)	SD 5	1.46 ± 0.07 (5)	1.52 ± 0.04 (5)
Percent of Control		108.1	112.6
A/G Ratio	SD 5	3.54 ± 0.17 (5)	3.27 ± 0.06 (5)
Percent of Control		92.0	84.9
Albumin (g/dL)	SD 5	5.12 ± 0.06 (5)	4.96 ± 0.09 (5)
Percent of Control		101.6	98.4
Cholesterol (mg/dL)	SD 5	111.0 ± 4.6 (5) *	143.2 ± 5.3 (5) **
Percent of Control		121.0	156.2
Triglyceride (mg/dL)	SD 5	70.0 ± 6.4 (5)	112.8 ± 10.4 (5) **
Percent of Control		127.5	205.5
Alanine Aminotransferase (IU/L)	SD 5	64.2 ± 21.3 (5)	55.2 ± 1.6 (5) *
Percent of Control		142.4	122.4
Alkaline Phosphatase (IU/L)	SD 5	306.8 ± 34.9 (5)	382.8 ± 41.5 (5)
Percent of Control		118.1	147.3

**Study Number:** 108020004  
**Test Type:** 5-Day Toxicity  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Rat/Harlan Sprague Dawley

**PA41: Clinical Chemistry Summary**  
**Test Compound:** 1,4-Dichlorobenzene  
**CAS Number:** 106-46-7

**Date Report Requested:** 09/26/2025  
**Time Report Requested:** 14:06:17  
**Lab:** Battelle

---

**Female: Core Animals**

---

	Phase Day	Treatment Groups (ppm)	
		400	800
Aspartate Aminotransferase (U/L)	SD 5	137.40 ± 47.79 (5)	106.40 ± 4.06 (5)
Percent of Control		160.0	123.9
Creatine Kinase (IU/L)	SD 5	253.4 ± 29.1 (5)	577.0 ± 121.6 (5)
Percent of Control		52.8	120.1
Sorbitol Dehydrogenase (IU/L)	SD 5	40.4 ± 23.7 (5)	23.6 ± 1.5 (5) *
Percent of Control		395.5	231.1
Bile salt/acids (µmol/L)	SD 5	5.6 ± 0.8 (5)	9.4 ± 3.2 (5)
Percent of Control		116.7	195.8

**Study Number:** 108020004  
**Test Type:** 5-Day Toxicity  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Rat/Harlan Sprague Dawley

**PA41: Clinical Chemistry Summary**  
**Test Compound:** 1,4-Dichlorobenzene  
**CAS Number:** 106-46-7

**Date Report Requested:** 09/26/2025  
**Time Report Requested:** 14:06:17  
**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

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

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  $p \leq 0.01$

Control and treated animals' total and direct bilirubin were below linearity, consistent with normal baseline concentrations and indicating no effect; these values are not reported.

Clinical chemistry data not reported was removed as an outlier, or was due to pre-analytical or analytical conditions or errors including but not limited to: below linearity, short sample, quantity not sufficient, or extreme hemolysis.

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