

**Experiment Number:** C50050-01

**Test Type:** TOX

**Route:** Dosing in Water

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

**C Number:**

**Cage Range:**

**Date Range:**

**Reasons For Removal:**

**Removal Date Range:**

**Treatment Groups:**

**Study Gender:**

**PA43: Hematology Summary**

**Test Compound:** 1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE

**CAS Number:** 79917-90-1

C50050-01

All

All

All

All

All

Both

**Date Report Requested:** 06/15/2018

**Time Report Requested:** 15:49:07

**Lab:** NTP

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Male

	Phase Day	Treatment Groups (mg/mL)			
		0	0.1	0.3	1
Hematocrit (%)	SD 92	51.2 ± 0.8 (10)	50.0 ± 0.6 (10)	50.5 ± 0.6 (10)	50.9 ± 0.7 (10)
Percent of Control			97.6	98.7	99.3
Manual Hematocrit (%)	SD 92	49.7 ± 0.7 (10)	48.1 ± 0.5 (10)	48.6 ± 0.7 (10)	49.0 ± 0.6 (10)
Percent of Control			96.8	97.8	98.6
Hemoglobin (g/dL)	SD 92	16.0 ± 0.2 (10)	15.6 ± 0.2 (10)	15.8 ± 0.2 (10)	15.7 ± 0.2 (10)
Percent of Control			97.5	99.3	98.5
Erythrocytes (10 <sup>6</sup> /uL)	SD 92	9.26 ± 0.08 (10)	9.19 ± 0.10 (10)	9.19 ± 0.09 (10)	9.38 ± 0.12 (10)
Percent of Control			99.17	99.24	101.27
Reticulocytes (10 <sup>3</sup> /uL)	SD 92	210.6 ± 11.1 (10)	191.4 ± 9.2 (10)	192.6 ± 6.0 (10)	192.4 ± 6.5 (10)
Percent of Control			90.9	91.5	91.4
Mean Cell Volume (fL)	SD 92	55.3 ± 0.6 (10)	54.5 ± 0.3 (10)	55.0 ± 0.2 (10)	54.2 ± 0.3 (10)
Percent of Control			98.5	99.5	98.0
Mean Cell Hemoglobin (pg)	SD 92	17.2 ± 0.1 (10) *	16.9 ± 0.1 (10)	17.2 ± 0.1 (10)	16.7 ± 0.1 (10) *
Percent of Control			98.5	100.2	97.3
Mean Cell Hemoglobin Concentration (g/dL)	SD 92	31.1 ± 0.2 (10)	31.1 ± 0.1 (10)	31.3 ± 0.1 (10)	30.9 ± 0.1 (10)
Percent of Control			99.9	100.7	99.3
Platelets (10 <sup>3</sup> /uL)	SD 92	696 ± 24 (10)	734 ± 38 (10)	643 ± 58 (10)	713 ± 15 (10)
Percent of Control			105	92	103
White Blood Cells (10 <sup>3</sup> /uL)	SD 92	12.23 ± 0.74 (10)	12.29 ± 0.63 (10)	11.78 ± 0.80 (10)	11.40 ± 0.71 (10)
Percent of Control			100.50	96.37	93.26
Neutrophils (10 <sup>3</sup> /uL)	SD 92	1.40 ± 0.12 (10)	1.22 ± 0.07 (10)	1.30 ± 0.09 (10)	1.20 ± 0.07 (10)
Percent of Control			87.04	92.38	85.75

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Lab: NTP

Male

	Phase Day	Treatment Groups (mg/mL)			
		0	0.1	0.3	1
Lymphocytes (10 <sup>3</sup> /uL)	SD 92	10.13 ± 0.60 (10)	10.42 ± 0.58 (10)	9.81 ± 0.74 (10)	9.58 ± 0.66 (10)
Percent of Control			102.87	96.84	94.55
Total Lymphocytes (10 <sup>3</sup> /uL)	SD 92	10.21 ± 0.61 (10)	10.49 ± 0.58 (10)	9.88 ± 0.75 (10)	9.65 ± 0.66 (10)
Percent of Control			102.73	96.83	94.56
Monocytes (10 <sup>3</sup> /uL)	SD 92	0.40 ± 0.05 (10)	0.40 ± 0.04 (10)	0.41 ± 0.05 (10)	0.36 ± 0.04 (10)
Percent of Control			100.25	103.26	88.97
Basophils (10 <sup>3</sup> /uL)	SD 92	0.03 ± 0.00 (10)	0.04 ± 0.01 (10)	0.04 ± 0.01 (10)	0.03 ± 0.00 (10)
Percent of Control			112.12	106.06	87.88
Eosinophils (10 <sup>3</sup> /uL)	SD 92	0.18 ± 0.01 (10)	0.14 ± 0.01 (10)	0.16 ± 0.02 (10)	0.16 ± 0.02 (10)
Percent of Control			77.47	87.36	87.36
Large Unstained Cells (10 <sup>3</sup> /uL)	SD 92	0.08 ± 0.01 (10)	0.07 ± 0.00 (10)	0.07 ± 0.01 (10)	0.07 ± 0.01 (10)
Percent of Control			84.42	94.81	96.10

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Female

	Phase Day	Treatment Groups (mg/mL)			
		0	0.1	0.3	1
Hematocrit (%)	SD 92	46.5 ± 0.5 (10) **	46.2 ± 0.3 (10)	46.7 ± 0.6 (9)	44.3 ± 0.4 (10) **
Percent of Control			99.3	100.4	95.2
Manual Hematocrit (%)	SD 92	45.5 ± 0.6 (10)	45.2 ± 0.4 (10)	45.9 ± 0.5 (9)	44.5 ± 0.4 (10)
Percent of Control			99.3	100.9	97.8
Hemoglobin (g/dL)	SD 92	14.8 ± 0.1 (10) *	14.8 ± 0.1 (10)	14.9 ± 0.2 (9)	14.3 ± 0.1 (10) *
Percent of Control			100.2	100.8	96.8
Erythrocytes (10 <sup>6</sup> /uL)	SD 92	8.35 ± 0.10 (10) *	8.29 ± 0.08 (10)	8.41 ± 0.08 (9)	8.00 ± 0.05 (10) *
Percent of Control			99.20	100.68	95.71
Reticulocytes (10 <sup>3</sup> /uL)	SD 92	201.6 ± 17.5 (10)	195.1 ± 12.1 (10)	201.0 ± 13.2 (9)	179.2 ± 8.9 (10)
Percent of Control			96.8	99.7	88.9
Mean Cell Volume (fL)	SD 92	55.7 ± 0.4 (10)	55.8 ± 0.4 (10)	55.5 ± 0.3 (9)	55.4 ± 0.2 (10)
Percent of Control			100.1	99.6	99.4
Mean Cell Hemoglobin (pg)	SD 92	17.7 ± 0.2 (10)	17.9 ± 0.1 (10)	17.7 ± 0.1 (9)	17.9 ± 0.1 (10)
Percent of Control			101.2	100.2	101.2
Mean Cell Hemoglobin Concentration (g/dL)	SD 92	31.8 ± 0.1 (10) *	32.1 ± 0.1 (10)	31.9 ± 0.1 (9)	32.4 ± 0.2 (10) *
Percent of Control			100.9	100.4	101.7
Platelets (10 <sup>3</sup> /uL)	SD 92	844 ± 46 (10)	825 ± 39 (10)	752 ± 54 (9)	766 ± 42 (10)
Percent of Control			98	89	91
White Blood Cells (10 <sup>3</sup> /uL)	SD 92	6.72 ± 0.45 (10)	7.67 ± 0.40 (10)	6.88 ± 0.51 (9)	6.57 ± 0.49 (10)
Percent of Control			114.10	102.36	97.74
Neutrophils (10 <sup>3</sup> /uL)	SD 92	1.28 ± 0.16 (10) *	1.06 ± 0.10 (10)	0.99 ± 0.12 (9)	0.87 ± 0.10 (10)
Percent of Control			82.77	77.61	68.36

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Lab: NTP

Female

	Phase Day	Treatment Groups (mg/mL)			
		0	0.1	0.3	1
Lymphocytes (10 <sup>3</sup> /uL)	SD 92	5.14 ± 0.39 (10)	6.17 ± 0.32 (10)	5.55 ± 0.43 (9)	5.36 ± 0.40 (10)
Percent of Control			120.05	107.98	104.34
Total Lymphocytes (10 <sup>3</sup> /uL)	SD 92	5.17 ± 0.40 (10)	6.21 ± 0.33 (10)	5.58 ± 0.43 (9)	5.40 ± 0.40 (10)
Percent of Control			120.07	107.91	104.37
Monocytes (10 <sup>3</sup> /uL)	SD 92	0.15 ± 0.02 (10)	0.23 ± 0.02 (10)	0.21 ± 0.04 (9)	0.17 ± 0.03 (10)
Percent of Control			156.76	141.14	111.49
Basophils (10 <sup>3</sup> /uL)	SD 92	0.01 ± 0.00 (10)	0.02 ± 0.00 (10) *	0.01 ± 0.00 (9)	0.01 ± 0.00 (10)
Percent of Control			228.57	111.11	157.14
Eosinophils (10 <sup>3</sup> /uL)	SD 92	0.12 ± 0.02 (10)	0.15 ± 0.01 (10)	0.10 ± 0.03 (9)	0.13 ± 0.03 (10)
Percent of Control			127.73	84.03	110.92
Large Unstained Cells (10 <sup>3</sup> /uL)	SD 92	0.03 ± 0.00 (10)	0.04 ± 0.00 (10)	0.03 ± 0.00 (9)	0.04 ± 0.01 (10)
Percent of Control			124.24	97.64	109.09

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LEGEND

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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

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  $P \leq 0.01$

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