

**Experiment Number:** C07018-01

**Test Type:** TOX

**Route:** Dosing in Water

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

**PA41: Clinical Chemistry Summary**

**Test Compound:** 1-Ethyl-3-Methylimidazolium Chloride

**CAS Number:** 65039-09-0

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

**Time Report Requested:** 15:59:52

**Lab:** NTP

**C Number:** C07018-01

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Both

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Male

	Phase Day	Treatment Groups (mg/mL)			
		0	1	3	10
Urea Nitrogen (mg/dL)	SD 92	16.9 ± 0.4 (10)	16.4 ± 0.4 (10)	17.0 ± 0.6 (10)	17.9 ± 0.6 (10)
Percent of Control			97.0	100.6	105.9
Creatinine (mg/dL)	SD 92	0.76 ± 0.02 (10)	0.75 ± 0.02 (10)	0.78 ± 0.01 (10)	0.75 ± 0.02 (10)
Percent of Control			98.68	102.63	98.68
Glucose (mg/dL)	SD 92	148.7 ± 11.0 (10)	154.0 ± 8.3 (10)	161.1 ± 10.3 (10)	144.4 ± 11.1 (10)
Percent of Control			103.6	108.3	97.1
Total Protein (g/dL)	SD 92	7.13 ± 0.07 (10)	7.04 ± 0.09 (10)	7.06 ± 0.10 (10)	7.01 ± 0.11 (10)
Percent of Control			98.74	99.02	98.32
Globulin (g/dL)	SD 92	2.69 ± 0.04 (10)	2.60 ± 0.06 (10)	2.68 ± 0.06 (10)	2.72 ± 0.06 (10)
Percent of Control			96.65	99.63	101.12
Globulin (g/dL)	SD 92	2.69 ± 0.04 (10)	2.60 ± 0.06 (10)	2.68 ± 0.06 (10)	2.72 ± 0.06 (10)
Percent of Control			96.65	99.63	101.12
A/G Ratio	SD 92	1.65 ± 0.03 (10)	1.71 ± 0.04 (10)	1.64 ± 0.04 (10)	1.58 ± 0.04 (10)
Percent of Control			103.70	99.27	95.77
Albumin (g/dL)	SD 92	4.44 ± 0.06 (10)	4.44 ± 0.05 (10)	4.38 ± 0.07 (10)	4.29 ± 0.08 (10)
Percent of Control			100.00	98.65	96.62
Cholesterol (mg/dL)	SD 92	133.1 ± 6.2 (10)	134.1 ± 4.6 (10)	129.0 ± 2.9 (10)	134.2 ± 4.6 (10)
Percent of Control			100.8	96.9	100.8
Triglyceride (mg/dL)	SD 92	113.1 ± 9.1 (10)	100.0 ± 8.2 (10)	113.4 ± 8.5 (10)	116.6 ± 11.5 (10)
Percent of Control			88.4	100.3	103.1
Alanine Aminotransferase (IU/L)	SD 92	51.00 ± 2.39 (10) *	52.00 ± 2.95 (10)	50.40 ± 2.11 (10)	41.80 ± 2.51 (10)
Percent of Control			101.96	98.82	81.96

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	Phase Day	Treatment Groups (mg/mL)			
		0	1	3	10
Alkaline Phosphatase (IU/L) Percent of Control	SD 92	199.1 ± 10.9 (10)	193.6 ± 11.7 (10) 97.2	201.3 ± 6.1 (10) 101.1	186.0 ± 8.0 (10) 93.4
Creatine Kinase (IU/L) Percent of Control	SD 92	255.0 ± 54.7 (10)	203.7 ± 41.4 (10) 79.9	195.2 ± 37.1 (10) 76.5	226.9 ± 39.1 (10) 89.0
Sorbitol Dehydrogenase (IU/L) Percent of Control	SD 92	13.6 ± 1.6 (10)	12.3 ± 1.5 (10) 90.4	13.4 ± 1.5 (10) 98.5	12.0 ± 1.0 (10) 88.2
Bile salt/acids (umol/L) Percent of Control	SD 92	24.8 ± 3.4 (10)	35.5 ± 4.7 (10) 143.1	30.1 ± 3.5 (10) 121.4	19.2 ± 3.6 (10) 77.4

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Female

	Phase Day	Treatment Groups (mg/mL)			
		0	1	3	10
Urea Nitrogen (mg/dL)	SD 92	19.0 ± 0.8 (10)	18.5 ± 1.0 (10)	17.3 ± 0.5 (10)	20.1 ± 0.4 (10)
Percent of Control			97.4	91.1	105.8
Creatinine (mg/dL)	SD 92	0.81 ± 0.01 (10)	0.83 ± 0.02 (10)	0.82 ± 0.01 (10)	0.78 ± 0.01 (10)
Percent of Control			102.47	101.23	96.30
Glucose (mg/dL)	SD 92	147.5 ± 3.2 (10)	171.7 ± 9.5 (10)	165.2 ± 8.6 (10)	164.2 ± 4.6 (10)
Percent of Control			116.4	112.0	111.3
Total Protein (g/dL)	SD 92	6.56 ± 0.08 (10)	6.80 ± 0.10 (10)	6.57 ± 0.11 (10)	6.47 ± 0.09 (10)
Percent of Control			103.66	100.15	98.63
Globulin (g/dL)	SD 92	1.81 ± 0.07 (10)	1.88 ± 0.05 (10)	1.76 ± 0.06 (10)	1.80 ± 0.04 (10)
Percent of Control			103.87	97.24	99.45
Globulin (g/dL)	SD 92	1.81 ± 0.07 (10)	1.88 ± 0.05 (10)	1.76 ± 0.06 (10)	1.80 ± 0.04 (10)
Percent of Control			103.87	97.24	99.45
A/G Ratio	SD 92	2.66 ± 0.12 (10)	2.63 ± 0.06 (10)	2.76 ± 0.10 (10)	2.60 ± 0.04 (10)
Percent of Control			98.80	103.64	97.77
Albumin (g/dL)	SD 92	4.75 ± 0.08 (10)	4.92 ± 0.07 (10)	4.81 ± 0.09 (10)	4.67 ± 0.06 (10)
Percent of Control			103.58	101.26	98.32
Cholesterol (mg/dL)	SD 92	97.9 ± 4.6 (10)	112.6 ± 4.2 (10)	111.3 ± 5.5 (10)	104.6 ± 4.7 (10)
Percent of Control			115.0	113.7	106.8
Triglyceride (mg/dL)	SD 92	69.5 ± 6.5 (10)	70.0 ± 7.4 (10)	80.8 ± 6.0 (10)	76.6 ± 5.8 (10)
Percent of Control			100.7	116.3	110.2
Alanine Aminotransferase (IU/L)	SD 92	47.50 ± 3.43 (10)	43.80 ± 2.36 (10)	47.40 ± 3.70 (10)	41.30 ± 3.09 (10)
Percent of Control			92.21	99.79	86.95

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		0	1	3	10
Alkaline Phosphatase (IU/L) Percent of Control	SD 92	158.4 ± 8.7 (10)	151.5 ± 6.4 (10) 95.6	155.1 ± 7.0 (10) 97.9	151.0 ± 9.6 (10) 95.3
Creatine Kinase (IU/L) Percent of Control	SD 92	168.2 ± 22.3 (10)	178.1 ± 20.1 (10) 105.9	183.3 ± 21.6 (10) 109.0	206.3 ± 31.5 (10) 122.7
Sorbitol Dehydrogenase (IU/L) Percent of Control	SD 92	10.1 ± 0.8 (9)	15.7 ± 2.1 (10) 155.3	21.4 ± 5.6 (10) 211.6	14.5 ± 2.3 (10) 143.4
Bile salt/acids (umol/L) Percent of Control	SD 92	22.3 ± 5.2 (10)	25.8 ± 4.5 (10) 115.7	22.6 ± 3.8 (10) 101.3	14.0 ± 1.9 (10) 62.8

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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  $P \leq 0.01$

Decrease in N for Sorbitol Dehydrogenase in the 0 mg/mL dose group is due to one female's value being excluded because it was an outlier.

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