C Number:	C50050-01
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both

Experiment Number: C50050-01
Test Type: TOX
Route: Dosing in Water
Species/Strain: Rat/Harlan Sprague Dawley

PA41: Clinical Chemistry Summary
Test Compound: 1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE
CAS Number: 79917-90-1

Date Report Requested: 06/15/2018
Time Report Requested: 15:49:03
Lab: NTP

Male

		Treatment Groups (mg/mL)			
	Phase Day	**0**	**0.1**	**0.3**	**1**
Urea Nitrogen (mg/dL)	SD 92	17.4 ± 0.6 (10)	17.2 ± 0.3 (10)	17.5 ± 0.5 (10)	17.0 ± 0.6 (10)
Percent of Control			98.9	100.6	97.7
Creatinine (mg/dL)	SD 92	0.69 ± 0.01 (10)	0.70 ± 0.00 (10)	0.70 ± 0.00 (10)	0.71 ± 0.02 (10)
Percent of Control			101.45	101.45	102.90
Glucose (mg/dL)	SD 92	134.3 ± 4.8 (10)	128.6 ± 3.2 (10)	131.8 ± 4.0 (10)	143.4 ± 5.6 (10)
Percent of Control			95.8	98.1	106.8
Total Protein (g/dL)	SD 92	6.48 ± 0.10 (10)	6.50 ± 0.08 (10)	6.70 ± 0.06 (10)	6.62 ± 0.08 (10)
Percent of Control			100.31	103.40	102.16
Globulin (g/dL)	SD 92	2.04 ± 0.07 (10)	2.01 ± 0.07 (10)	2.14 ± 0.04 (10)	2.07 ± 0.05 (10)
Percent of Control			98.53	104.90	101.47
A/G Ratio	SD 92	2.20 ± 0.08 (10)	2.26 ± 0.09 (10)	2.14 ± 0.04 (10)	2.21 ± 0.05 (10)
Percent of Control			102.90	97.24	100.54
Albumin (g/dL)	SD 92	4.44 ± 0.06 (10)	4.49 ± 0.03 (10)	4.56 ± 0.04 (10)	4.55 ± 0.04 (10)
Percent of Control			101.13	102.70	102.48
Cholesterol (mg/dL)	SD 92	134.2 ± 3.9 (10)	136.0 ± 5.8 (10)	132.5 ± 4.2 (10)	133.7 ± 4.9 (10)
Percent of Control			101.3	98.7	99.6
Triglyceride (mg/dL)	SD 92	114.7 ± 7.5 (10)	112.8 ± 8.9 (10)	132.7 ± 12.2 (10)	119.1 ± 8.8 (10)
Percent of Control			98.3	115.7	103.8
Alanine Aminotransferase (IU/L)	SD 92	54.90 ± 4.25 (10) *	57.40 ± 4.38 (10)	53.40 ± 2.52 (10)	44.50 ± 1.83 (10)
Percent of Control			104.55	97.27	81.06
Alkaline Phosphatase (IU/L)	SD 92	213.3 ± 9.7 (10)	240.1 ± 11.6 (10)	221.9 ± 7.6 (10)	228.8 ± 13.2 (10)
Percent of Control			112.6	104.0	107.3

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CAS Number: 79917-90-1

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Male

		Treatment Groups (mg/mL)			
	Phase Day	**0**	**0.1**	**0.3**	**1**
Creatine Kinase (IU/L)	SD 92	230.0 ± 48.2 (10)	170.1 ± 14.9 (10)	169.0 ± 27.7 (10)	226.3 ± 32.6 (10)
Percent of Control			74.0	73.5	98.4
Sorbitol Dehydrogenase (IU/L)	SD 92	14.1 ± 1.4 (10)	14.4 ± 2.0 (10)	11.4 ± 1.3 (10)	10.7 ± 1.0 (10)
Percent of Control			102.1	80.9	75.9
Bile salt/acids (umol/L)	SD 92	32.5 ± 4.5 (10)	26.2 ± 2.5 (10)	31.7 ± 4.6 (10)	30.7 ± 3.7 (10)
Percent of Control			80.6	97.5	94.5

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CAS Number: 79917-90-1

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Female

		Treatment Groups (mg/mL)			
	Phase Day	**0**	**0.1**	**0.3**	**1**
Urea Nitrogen (mg/dL)	SD 92	18.7 ± 0.7 (10)	18.9 ± 0.5 (10)	18.1 ± 0.6 (10)	19.2 ± 0.5 (10)
Percent of Control			101.1	96.8	102.7
Creatinine (mg/dL)	SD 92	0.79 ± 0.01 (10)	0.77 ± 0.02 (10)	0.80 ± 0.01 (10)	0.76 ± 0.02 (10)
Percent of Control			97.47	101.27	96.20
Glucose (mg/dL)	SD 92	183.7 ± 8.3 (10) *	168.9 ± 7.4 (10)	165.8 ± 6.5 (10)	153.9 ± 6.5 (10)
Percent of Control			91.9	90.3	83.8
Total Protein (g/dL)	SD 92	6.48 ± 0.13 (10)	6.35 ± 0.06 (10)	6.59 ± 0.11 (10)	6.34 ± 0.09 (10)
Percent of Control			97.99	101.70	97.84
Globulin (g/dL)	SD 92	1.70 ± 0.12 (10)	1.56 ± 0.04 (10)	1.62 ± 0.05 (10)	1.60 ± 0.05 (10)
Percent of Control			91.76	95.29	94.12
A/G Ratio	SD 92	2.93 ± 0.19 (10)	3.08 ± 0.07 (10)	3.10 ± 0.12 (10)	2.98 ± 0.08 (10)
Percent of Control			105.42	105.88	101.91
Albumin (g/dL)	SD 92	4.78 ± 0.06 (10)	4.79 ± 0.04 (10)	4.97 ± 0.10 (10)	4.74 ± 0.06 (10)
Percent of Control			100.21	103.97	99.16
Cholesterol (mg/dL)	SD 92	110.1 ± 3.4 (10)	109.8 ± 4.6 (10)	109.6 ± 6.9 (10)	104.7 ± 4.3 (10)
Percent of Control			99.7	99.5	95.1
Triglyceride (mg/dL)	SD 92	54.9 ± 4.3 (10)	58.5 ± 2.6 (10)	69.0 ± 8.4 (10)	76.4 ± 10.8 (10)
Percent of Control			106.6	125.7	139.2
Alanine Aminotransferase (IU/L)	SD 92	45.70 ± 1.89 (10)	45.70 ± 2.06 (10)	48.80 ± 2.91 (10)	42.10 ± 1.64 (10)
Percent of Control			100.00	106.78	92.12
Alkaline Phosphatase (IU/L)	SD 92	172.0 ± 7.7 (10)	190.3 ± 7.2 (10)	194.0 ± 12.7 (10)	173.8 ± 8.2 (10)
Percent of Control			110.6	112.8	101.0

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Female

		Treatment Groups (mg/mL)			
	Phase Day	**0**	**0.1**	**0.3**	**1**
Creatine Kinase (IU/L)	SD 92	203.4 ± 42.5 (10)	191.8 ± 42.7 (10)	180.0 ± 24.9 (10)	167.2 ± 24.8 (10)
Percent of Control			94.3	88.5	82.2
Sorbitol Dehydrogenase (IU/L)	SD 92	11.4 ± 0.8 (10)	10.6 ± 1.6 (10)	13.5 ± 2.0 (10)	9.0 ± 0.7 (10)
Percent of Control			93.0	118.4	78.9
Bile salt/acids (umol/L)	SD 92	21.7 ± 3.2 (10)	28.9 ± 4.6 (10)	23.6 ± 2.0 (10)	20.3 ± 3.0 (10)
Percent of Control			133.2	108.8	93.5

LEGEND

Values given as mean ± 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 <= 0.05
** Statistically significant at P <= 0.01

** END OF REPORT **