

**Experiment Number:** 50050 - 01  
**Test Type:** 14-WEEK  
**Route:** DOSED WATER  
**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
**CAS Number:** 79917-90-1

**Date Report Requested:** 10/05/2020  
**Time Report Requested:** 12:59:00  
**First Dose M/F:** 04/25/13 / 04/26/13  
**Lab:** BAT

BMIM Rats - Final 2

**NTP Study Number:** C50050  
**Lock Date:** 05/25/2018  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** NONE

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HARLAN SPRAGUE DAWLEY RATS MALE 0 mg/mL male	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9		1	1	1	1	1	1	1	1	1	
		2	2	2	2	2	2	2	2	2		0	0	0	0	0	0	0	0	0	
												1	1	1	1	1	1	1	1	1	
												0	0	0	0	0	0	0	0	1	
												1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active				1							1 1.0
Mineral				1							1 1.0

CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2		
0 mg/mL male	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1	1	1	1		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
<b>* TOTALS</b>												

Blood Vessel	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Heart	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Cardiomyopathy					1							<b>1 1.0</b>

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Parathyroid Gland	+	+	+	+	+	+	+	M	M	+		<b>8</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Duct, Exfoliated Germ Cell				1								<b>1 1.0</b>
Preputial Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>
Inflammation, Chronic Active			2	1		1						<b>3 1.3</b>

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9			
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	0	0	0
0 mg/mL male	0	0	0	0	0	0	0	0	0	0	1	1	1
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	0	0	0
	1	2	3	4	5	6	7	8	9	0			* TOTALS
Prostate	+	+	+	+	+	+	+	+	+	+			10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+			10
Testis	+	+	+	+	+	+	+	+	+	+			10
Germinal Epithelium, Degeneration				1							1	1.0	
<b>HEMATOPOIETIC SYSTEM</b>													
Bone Marrow	+	+	+	+	+	+	+	+	+	+			10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+			10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+			10
Spleen	+	+	+	+	+	+	+	+	+	+			10
Thymus	+	+	+	+	+	+	+	+	+	+			10
<b>INTEGUMENTARY SYSTEM</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+			10
Skin	+	+	+	+	+	+	+	+	+	+			10
<b>MUSCULOSKELETAL SYSTEM</b>													
Bone	+	+	+	+	+	+	+	+	+	+			10
<b>NERVOUS SYSTEM</b>													

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9		0	0
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	1	1	1
0 mg/mL male	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	0	0	0
	1	2	3	4	5	6	7	8	9	0			
												* TOTALS	
Brain	+	+	+	+	+	+	+	+	+	+			10
<b>RESPIRATORY SYSTEM</b>													
Lung	+	+	+	+	+	+	+	+	+	+			10
Nose	+	+	+	+	+	+	+	+	+	+			10
Olfactory Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1			1			7	1.0
Trachea	+	+	+	+	+	+	+	+	+	+			10
<b>SPECIAL SENSES SYSTEM</b>													
Eye	+	+	+	+	+	+	+	+	+	+			10
Harderian Gland	+	+	+	+	+	+	+	+	+	+			10
<b>URINARY SYSTEM</b>													
Kidney	+	+	+	+	+	+	+	+	+	+			10
Nephropathy, Chronic Progressive		1	1	1	1	1	1	1	1	1		9	1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+			10

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Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>1 mg/mL male</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		3	3	3	3	3	3	3	3	4	
		1	2	3	4	5	6	7	8	9	
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Acinus, Atrophy						1					<b>1 1.0</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------	---	---	---	---	---	---	---	---	---	---	-----------

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

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Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2
1 mg/mL male										
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0

\* TOTALS

Heart	+	+	+	+	+	+	+	+	+	+	10	
Cardiomyopathy		1										1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10	
Duct, Exfoliated Germ Cell		1										1 1.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10	
Infiltration Cellular, Mononuclear Cell							1					1 1.0
Inflammation, Chronic Active	2			4				2				3 2.7

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	
1 mg/mL male	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	
	3	3	3	3	3	3	3	3	3	3	
	1	2	3	4	5	6	7	8	9	4	
											* TOTALS
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testis	+	+	+	+	+	+	+	+	+	+	10
Germinal Epithelium, Degeneration	1										1 1.0
<b>HEMATOPOIETIC SYSTEM</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>											
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>											

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS MALE	2	2	2	2	2	2	2	2	2	2	
1 mg/mL male											
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	3	3	3	3	3	3	3	3	3	3	
	1	2	3	4	5	6	7	8	9	0	
<b>* TOTALS</b>											
Brain	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<b>RESPIRATORY SYSTEM</b>											
Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet	1		1	1				1	1	1	<b>6 1.0</b>
Respiratory Epithelium, Inflammation, Chronic Active	1										<b>1 1.0</b>
Transitional Epithelium, Inflammation, Chronic Active	2										<b>1 2.0</b>
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<b>SPECIAL SENSES SYSTEM</b>											
Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<b>URINARY SYSTEM</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nephropathy, Chronic Progressive		1	1	1		1	1	1	1	1	<b>8 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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Lab: BAT

---

\*\*\* END OF MALE DATA \*\*\*

---

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>FEMALE</b> <b>0 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		4	4	4	4	4	4	4	4	5	
		1	2	3	4	5	6	7	8	9	
											<b>* TOTALS</b>

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS FEMALE
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	0 mg/mL female
	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	4	4	4	4	4	4	4	4	4	5	
	1	2	3	4	5	6	7	8	9	0	
<b>* TOTALS</b>											

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Spleen	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Thymus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**INTEGUMENTARY SYSTEM**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Skin	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**MUSCULOSKELETAL SYSTEM**

Bone	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Maxilla, Inflammation, Chronic Active		3									<b>1 3.0</b>

**NERVOUS SYSTEM**

Brain	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

**RESPIRATORY SYSTEM**

Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
------	---	---	---	---	---	---	---	---	---	---	-----------

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	0	0	0	0	0	0	0	0	0	0			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	9	9	9	9	9	9	9	9	9	9			
<b>FEMALE</b>	2	2	2	2	2	2	2	2	2	2			
<b>0 mg/mL female</b>	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	1	1	1	1	1	1	1	1	1	1			
	4	4	4	4	4	4	4	4	4	5			
	1	2	3	4	5	6	7	8	9	0			
											<b>* TOTALS</b>		
Nose											<b>10</b>		
Epithelium, Inflammation, Chronic Active	1		1	2	1	2	2	1	2	2		<b>9</b>	<b>1.6</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet		1			1		1	1		1		<b>5</b>	<b>1.0</b>
Trachea											<b>10</b>		
<b>SPECIAL SENSES SYSTEM</b>													
Eye											<b>10</b>		
Harderian Gland											<b>10</b>		
<b>URINARY SYSTEM</b>													
Kidney											<b>10</b>		
Nephropathy, Chronic Progressive	1	1	1						1	1		<b>5</b>	<b>1.0</b>
Urinary Bladder											<b>10</b>		

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS FEMALE
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	0.1 mg/mL female
	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	5	5	5	5	5	5	5	5	5	6	
	1	2	3	4	5	6	7	8	9	0	
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

NONE

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

NONE

**HEMATOPOIETIC SYSTEM**

NONE

**INTEGUMENTARY SYSTEM**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

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Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b> <b>0.1 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	2	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	
		5	5	5	5	5	5	5	5	5	6	
		1	2	3	4	5	6	7	8	9	0	

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Epithelium, Inflammation, Chronic Active	1	1	1	1	2	2	2	2	1	1	<b>10 1.4</b>

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b> <b>0.3 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		6	6	6	6	6	6	6	6	7	
		1	2	3	4	5	6	7	8	9	
											<b>* TOTALS</b>

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Nose											<b>7</b>
Epithelium, Inflammation, Chronic Active											<b>7 1.4</b>

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>FEMALE</b> <b>1 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		7	7	7	7	7	7	7	7	8	
		1	2	3	4	5	6	7	8	9	
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
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\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9			0	0	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2		1	1	1	1	1	1	1	1	1	
												7	7	7	7	7	7	7	7	8	
												1	2	3	4	5	6	7	8	9	0
											<b>* TOTALS</b>										

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	<b>10</b>
----------------	---	---	---	---	---	---	---	---	---	---	-----------

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-----------------	---	---	---	---	---	---	---	---	---	---	-----------

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------------	---	---	---	---	---	---	---	---	---	---	-----------

Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------------------	---	---	---	---	---	---	---	---	---	---	-----------

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-----------------	---	---	---	---	---	---	---	---	---	---	-----------

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
---------------	---	---	---	---	---	---	---	---	---	---	-----------

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>		
Infiltration Cellular, Mononuclear Cell			2		1			2	1			<b>4</b>	<b>1.5</b>

Ovary	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

Uterus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------	---	---	---	---	---	---	---	---	---	---	-----------

**HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	DAY ON TEST										* TOTALS
	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	0 9 2	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	7	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0	
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular Hyperplasia, Lymphocyte	+	+	+	+	+	+	+	+	+	+	10 1 1.0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>											
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>											
Brain	+	+	+	+	+	+	+	+	+	+	10
<b>RESPIRATORY SYSTEM</b>											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 10/05/2020

Time Report Requested: 12:59:00

First Dose M/F: 04/25/13 / 04/26/13

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS FEMALE	2	2	2	2	2	2	2	2	2	2	
1 mg/mL female											
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	7	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0	
											<b>* TOTALS</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet	1					1	1	1			<b>4 1.0</b>
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<b>SPECIAL SENSES SYSTEM</b>											
Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<b>URINARY SYSTEM</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nephropathy, Chronic Progressive		1					1				<b>2 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked