

Experiment Number: 05049 - 03
Test Type: 14-DAY
Route: DOSED WATER
Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Ionic liquid Toxicity
CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020
Time Report Requested: 11:25:09
First Dose M/F: 03/09/09 / 03/10/09
Lab: MBA

NTP Study Number: C05049

Lock Date: 12/04/2009

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups:	Include 001 Control Male	Include 002 0.3mg/ml Bmim	Include 003 1.0 mg/ml Bmim
	Include 004 3.0 mg/ml Bmim	Include 015 Control Female	Include 016 0.3 mg/ml Bmim
	Include 017 1.0 mg/ml Bmim	Include 018 3.0 mg/ml Bmim	

Study Gender: Both

TDMSE Version: 3.0.2.3_002

PWG Approval Date: NONE

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Lab: MBA

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS 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
	5	5	5	5	5	5	5	5	5	5
	<hr/>									
Control Male	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

* TOTALS

ALIMENTARY SYSTEM

Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1		1	1	1		1	1	1	1	8 1.0

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Testes	+	+	+	+	+	+	+	+	+	+	10
--------	---	---	---	---	---	---	---	---	---	---	-----------

* .. 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: MBA

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS MALE
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	Control Male
	5	5	5	5	5	5	5	5	5	5	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
* TOTALS											

HEMATOPOIETIC SYSTEM

Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	10
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RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	10
Metaplasia, Osseous	1										1 1.0

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
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Lab: MBA

DAY ON TEST	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS MALE 3.0 mg/ml Bmim	ANIMAL ID	0	0	0	0	0	
	0	0	0	0	0			0	0	0	0	0	
	1	1	1	1	1			0	0	0	0	0	
	5	5	5	5	5			2	2	2	2	2	
								1	2	3	4	5	
											* TOTALS		

ALIMENTARY SYSTEM

Intestine Small, Duodenum	+	+	+	+	+	5
Intestine Small, Ileum	+	+	+	+	+	5
Intestine Small, Jejunum	+	+	+	+	+	5
Liver	+	+	+	+	+	5
Stomach, Forestomach	+	+	+	+	+	5
Stomach, Glandular	+	+	+	+	+	5

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	5
Cardiomyopathy		1	1		1	3 1.0

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Testes	+	+	+	+	+	5
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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

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Lab: MBA

HARLAN SPRAGUE DAWLEY RATS MALE	DAY ON TEST	0	0	0	0	0	
		0	0	0	0	0	
		1	1	1	1	1	
		5	5	5	5	5	
		5	5	5	5	5	
3.0 mg/ml Bmim	ANIMAL ID	0	0	0	0	0	
		0	0	0	0	0	
		0	0	0	0	0	
		2	2	2	2	2	
		1	2	3	4	5	
* TOTALS							

HEMATOPOIETIC SYSTEM

Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

Brain	+	+	+	+	+	5
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RESPIRATORY SYSTEM

Lung	+	+	+	+	+	5
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SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	5
--------	---	---	---	---	---	----------

* .. 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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Lab: MBA

*** END OF MALE DATA ***

* .. 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: MBA

HARLAN SPRAGUE DAWLEY RATS FEMALE Control Female	DAY ON TEST	0	0	0	0	0	0	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	1	1	1
		5	5	5	5	5	5	5	5	5	5	5	5	5
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	8	8	8	8	8	8	8	8	8	
	6	7	8	9	0	1	2	3	4	5				
													* TOTALS	

ALIMENTARY SYSTEM

Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+				10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+				10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+				10
Liver	+	+	+	+	+	+	+	+	+	+				10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+				10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+				10

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary	+	+	+	+	+	+	+	+	+	+				10
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Lab: MBA

HARLAN SPRAGUE DAWLEY RATS FEMALE	DAY ON TEST	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	5	
	Control Female											
	ANIMAL ID	0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0		
		7	7	7	7	8	8	8	8	8		
		6	7	8	9	0	1	2	3	4		5
* TOTALS												

HEMATOPOIETIC SYSTEM

Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	10
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RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	10
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SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
--------	---	---	---	---	---	---	---	---	---	---	-----------

* .. 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: MBA

HARLAN SPRAGUE DAWLEY RATS FEMALE	DAY ON TEST	0	0	0	0	0	
		0	0	0	0	0	
		1	1	1	1	1	
		5	5	5	5	5	
		5	5	5	5	5	
0.3 mg/ml Bmim	ANIMAL ID	0	0	0	0	0	
		0	0	0	0	0	
		0	0	0	0	0	
		8	8	8	8	9	
		6	7	8	9	0	
* TOTALS							

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
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1-4 .. Lesion qualified as:
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Lab: MBA

DAY ON TEST	0	0	0	0	0	
	0	0	0	0	0	
	1	1	1	1	1	
	5	5	5	5	5	
	5	5	5	5	5	
ANIMAL ID	0	0	0	0	0	
	0	0	0	0	0	
	0	0	0	0	0	
	8	8	8	8	9	
	6	7	8	9	0	

* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Lung	-	-	-	-	+					
Hemorrhage					1					1 1.0

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

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Lab: MBA

HARLAN SPRAGUE DAWLEY RATS FEMALE 3.0 mg/ml Bmim	DAY ON TEST	0	0	0	0	0	
		0	0	0	0	0	
		1	1	1	1	1	
		5	5	5	5	5	
		0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	
		0	0	0	0	0	
		0	0	0	0	1	
		9	9	9	9	0	
		6	7	8	9	0	
							* TOTALS

ALIMENTARY SYSTEM

Intestine Small, Duodenum	+	+	+	+	+		5
Intestine Small, Ileum	+	+	+	+	+		5
Intestine Small, Jejunum	+	+	+	+	+		5
Liver	+	+	+	+	+		5
Stomach, Forestomach	+	+	+	+	+		5
Stomach, Glandular	+	+	+	+	+		5

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+		5
Cardiomyopathy		1		1			2 1.0

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary	+	+	+	+	+		5
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Lab: MBA

DAY ON TEST	0	0	0	0	0	ANIMAL ID	0	0	0	0	0
	0	0	0	0	0		0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS FEMALE	1	1	1	1	1	3.0 mg/ml Bmim	0	0	0	0	1
	5	5	5	5	5		9	9	9	9	0
							6	7	8	9	0
* TOTALS											

HEMATOPOIETIC SYSTEM

Spleen	+	+	+	+	+	5
Thymus	+	+	+	+	+	5

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

Brain	+	+	+	+	+	5
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RESPIRATORY SYSTEM

Lung	+	+	+	+	+	5
------	---	---	---	---	---	----------

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney	+	+	+	+	+	5
Hyperplasia, Tubular			1			1 1.0

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