

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

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**

Ionic liquid Toxicity  
**CAS Number:** IONICLIQUIDS

**Date Report Requested:** 04/24/2020  
**Time Report Requested:** 12:07:24  
**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 005 3.0 mg/ml Emim      Include 006 10.0 mg/ml Emim  
Include 007 30.0 mg/ml Emim      Include 008 100.0 mg/ml Emim      Include 015 Control Female  
Include 019 3.0 mg/ml Emim      Include 020 10.0 mg/ml Emim      Include 021 30.0 mg/ml Emim  
Include 022 100.0 mg/ml Emim  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** NONE

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Lab: MBA

Harlan Sprague Dawley RATS MALE	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
<b>Disposition Summary</b>					
Animals Initially In Study	10	5	5	5	5
Early Deaths					
Survivors					
Terminal Sacrifice	10	5	5	5	5
Animals Examined Microscopically	10	5	5	5	5
<b>ALIMENTARY SYSTEM</b>					
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(5)
Liver	(10)	(0)	(5)	(5)	(5)
Depletion Glycogen				5 (100%)	5 (100%)
Necrosis, Multifocal					1 (20%)
Hepatocyte, Necrosis					1 (20%)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(5)
Stomach, Glandular	(10)	(0)	(0)	(0)	(5)
<b>CARDIOVASCULAR SYSTEM</b>					
Heart	(10)	(0)	(0)	(0)	(5)
Cardiomyopathy	8 (80%)				1 (20%)
<b>ENDOCRINE SYSTEM</b>					
None					
<b>GENERAL BODY SYSTEM</b>					
None					

a - Number of animals examined microscopically at site and number of animals with lesion

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<b>GENITAL SYSTEM</b>					
Testes	(10)	(0)	(0)	(5)	(5)
Degeneration					5 (100%)
<b>HEMATOPOIETIC SYSTEM</b>					
Spleen	(10)	(0)	(0)	(5)	(4)
Depletion Cellular					3 (75%)
Infiltration Cellular					1 (25%)
Thymus	(10)	(0)	(5)	(5)	(2)
Atrophy					2 (100%)
Necrosis				4 (80%)	2 (100%)
<b>INTEGUMENTARY SYSTEM</b>					
None					
<b>MUSCULOSKELETAL SYSTEM</b>					
None					
<b>NERVOUS SYSTEM</b>					
Brain	(10)	(0)	(0)	(0)	(5)
<b>RESPIRATORY SYSTEM</b>					
Lung	(10)	(0)	(0)	(0)	(5)
Metaplasia, Osseous	1 (10%)				

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Harlan Sprague Dawley RATS MALE

Control Male

3.0 mg/ml Emim

10.0 mg/ml Emim

30.0 mg/ml Emim

100.0 mg/ml Emim

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SPECIAL SENSES SYSTEM

None

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URINARY SYSTEM

Kidney

(10)

(0)

(0)

(0)

(5)

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

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Harlan Sprague Dawley RATS FEMALE

Control Female

3.0 mg/ml Emim

10.0 mg/ml Emim

30.0 mg/ml Emim

100.0 mg/ml Emim

**Disposition Summary**

Animals Initially In Study	10	5	5	5	5
Early Deaths					
Survivors					
Terminal Sacrifice	10	5	5	5	5
Animals Examined Microscopically	10	5	5	5	5

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(5)
Liver	(10)	(0)	(0)	(5)	(5)
Congestion					1 (20%)
Depletion Glycogen					5 (100%)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(5)
Stomach, Glandular	(10)	(0)	(0)	(0)	(5)

CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(5)
Cardiomyopathy	10 (100%)				2 (40%)

ENDOCRINE SYSTEM

None

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

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Harlan Sprague Dawley RATS FEMALE	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Ovary	(10)	(0)	(0)	(0)	(5)
Uterus	(0)	(0)	(0)	(0)	(1)
<b>HEMATOPOIETIC SYSTEM</b>					
Spleen	(10)	(0)	(0)	(5)	(5)
Depletion Cellular					5 (100%)
Thymus	(10)	(0)	(5)	(5)	(5)
Atrophy					5 (100%)
Necrosis				1 (20%)	5 (100%)
<b>INTEGUMENTARY SYSTEM</b>					
None					
<b>MUSCULOSKELETAL SYSTEM</b>					
None					
<b>NERVOUS SYSTEM</b>					
Brain	(10)	(0)	(0)	(0)	(5)
<b>RESPIRATORY SYSTEM</b>					
Lung	(10)	(1)	(0)	(0)	(5)
Hemorrhage		1 (100%)			
<b>SPECIAL SENSES SYSTEM</b>					
None					

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Control Female

3.0 mg/ml Emim

10.0 mg/ml Emim

30.0 mg/ml Emim

100.0 mg/ml Emim

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URINARY SYSTEM

Kidney

(10)

(0)

(0)

(0)

(5)

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

a - Number of animals examined microscopically at site and number of animals with lesion