Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Final_1 - EMIM Rats

NTP Study Number: C07018

Lock Date: 05/25/2018

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Include ALL **Treatment Groups:**

Study Gender: Both

TDMSE Version: 3.0.2.3_002

PWG Approval Date: NONE

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF IONIC LIQUID: 1-ETHYL-3-METHYLIMIDAZOLIUM CHLORIDE

MALE RATS

Organ

Stomach, Glandular

FEMALE RATS

Organ

Liver Nose: Respiratory Epithelium Stomach, Forestomach

Morphology

Mineral

Morphology

Hepatodiaphragmatic Nodule Inflammation Cyst

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Adrenal Cortex Hypertrophy Focal			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Adrenal Cortex: Bilateral			
Hypertrophy Focal			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

I ah: R

Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Date Report Requested: 01/08/2020

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Eye: Retina Dysplasia			
LESION RATES			
OVERALL (a)	1/10 (10%)	1/10 (10%)	
POLY-3 RATE (b)	1/10.00	1/10.00	
POLY-3 PERCENT (g)	10%	10%	
TERMINAL (d)	1/10 (10%)	1/10 (10%)	
FIRST INCIDENCE	92 (T)	92 (T)	
STATISTICAL TESTS			
POLY 3		P=0.760	
POLY 1.5		P=0.760	
POLY 6		P=0.760	
COCH-ARM / FISHERS		P=0.763N	
MAX-ISO-POLY-3		P=1.000	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Date Report Requested: 01/08/2020

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Harderian Gland		
Infiltration Cellular Lympho	cyte	
LESION RATES		
OVERALL (a)	1/10 (10%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/10.00
POLY-3 PERCENT (g)	10%	0%
TERMINAL (d)	1/10 (10%)	0/10 (0%)
FIRST INCIDENCE	92 (T)	
STATISTICAL TESTS		
POLY 3		P=0.500N
POLY 1.5		P=0.500N
POLY 6		P=0.500N
COCH-ARM / FISHERS		P=0.500N
MAX-ISO-POLY-3		P=0.158N

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Males	
DOSE	0 mg/mL male	10 mg/mL male		
Harderian Gland				
Infiltration Cellular Mononu	clear Cell			
LESION RATES				
OVERALL (a)	1/10 (10%)	1/10 (10%)		
POLY-3 RATE (b)	1/10.00	1/10.00		
POLY-3 PERCENT (g)	10%	10%		
TERMINAL (d)	1/10 (10%)	1/10 (10%)		
FIRST INCIDENCE	92 (T)	92 (T)		
STATISTICAL TESTS				
POLY 3		P=0.760		
POLY 1.5		P=0.760		
POLY 6		P=0.760		
COCH-ARM / FISHERS		P=0.763N		
MAX-ISO-POLY-3		P=1.000		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Males	
DOSE	0 mg/mL male	10 mg/mL male		
Heart				
Cardiomyopathy				
LESION RATES				
OVERALL (a)	1/10 (10%)	3/10 (30%)		
POLY-3 RATE (b)	1/10.00	3/10.00		
POLY-3 PERCENT (g)	10%	30%		
TERMINAL (d)	1/10 (10%)	3/10 (30%)		
FIRST INCIDENCE	92 (T)	92 (T)		
STATISTICAL TESTS				
POLY 3		P=0.292		
POLY 1.5		P=0.292		
POLY 6		P=0.292		
COCH-ARM / FISHERS		P=0.291		
MAX-ISO-POLY-3		P=0.136		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Heart: Valve Fibrosis			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Kidney			
Infiltration Cellular Mononu	clear Cell		
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Kidney		
Nephropathy Chronic Progr	ressive	
LESION RATES		
OVERALL (a)	9/10 (90%)	8/10 (80%)
POLY-3 RATE (b)	9/10.00	8/10.00
POLY-3 PERCENT (g)	90%	80%
TERMINAL (d)	9/10 (90%)	8/10 (80%)
FIRST INCIDENCE	92 (T)	92 (T)
STATISTICAL TESTS		
POLY 3		P=0.500N
POLY 1.5		P=0.500N
POLY 6		P=0.500N
COCH-ARM / FISHERS		P=0.500N
MAX-ISO-POLY-3		P=0.274N

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males
DOSE	0 mg/mL male	10 mg/mL male
Liver Clear Cell Focus		
LESION RATES		
OVERALL (a)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE		
STATISTICAL TESTS		
POLY 3		(n)
POLY 1.5		(n)
POLY 6		(n)
COCH-ARM / FISHERS		(n)
MAX-ISO-POLY-3		(n)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males
DOSE	0 mg/mL male	10 mg/mL male
Liver Hepatodiaphragmatic Nodule		
LESION RATES		
OVERALL (a)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE		
STATISTICAL TESTS		
POLY 3		(n)
POLY 1.5		(n)
POLY 6		(n)
COCH-ARM / FISHERS		(n)
MAX-ISO-POLY-3		(n)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Liver		
Infiltration Cellular Mixed C	ell	
LESION RATES		
OVERALL (a)	1/10 (10%)	2/10 (20%)
POLY-3 RATE (b)	1/10.00	2/10.00
POLY-3 PERCENT (g)	10%	20%
TERMINAL (d)	1/10 (10%)	2/10 (20%)
FIRST INCIDENCE	92 (T)	92 (T)
STATISTICAL TESTS		
POLY 3		P=0.500
POLY 1.5		P=0.500
POLY 6		P=0.500
COCH-ARM / FISHERS		P=0.500
MAX-ISO-POLY-3		P=0.274

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Males	
DOSE	0 mg/mL male	10 mg/mL male		
Lung				
Infiltration Cellular Histiocyt	e e			
LESION RATES				
OVERALL (a)	2/10 (20%)	0/10 (0%)		
POLY-3 RATE (b)	2/10.00	0/10.00		
POLY-3 PERCENT (g)	20%	0%		
TERMINAL (d)	2/10 (20%)	0/10 (0%)		
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3		P=0.227N		
POLY 1.5		P=0.227N		
POLY 6		P=0.227N		
COCH-ARM / FISHERS		P=0.237N		
MAX-ISO-POLY-3		P=0.066N		

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Lung Inflammation Chronic			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males
DOSE	0 mg/mL male	10 mg/mL male
Lymph Node: Mediastinal Hemorrhage		
LESION RATES		
OVERALL (a)	0/0 (0%)	0/0 (0%)
POLY-3 RATE (b)	0/0.00	0/0.00
POLY-3 PERCENT (g)	0%	0%
TERMINAL (d)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE		
STATISTICAL TESTS		
POLY 3		(n)
POLY 1.5		(n)
POLY 6		(n)
COCH-ARM / FISHERS		(n)
MAX-ISO-POLY-3		(n)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Nose: Goblet Cell, Respirate	ory Epithelium		
Hyperplasia			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride **CAS Number:** 65039-09-0

Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Date Report Requested: 01/08/2020

Lab: BAT

			Males
DOSE	0 mg/mL male	10 mg/mL male	
Nose: Olfactory Epithelium	der		
Accumulation, Hyaline Drop	Diet		
LESION RATES			
OVERALL (a)	5/10 (50%)	7/10 (70%)	
POLY-3 RATE (b)	5/10.00	7/10.00	
POLY-3 PERCENT (g)	50%	70%	
TERMINAL (d)	5/10 (50%)	7/10 (70%)	
FIRST INCIDENCE	92 (T)	92 (T)	
STATISTICAL TESTS			
POLY 3		P=0.329	
POLY 1.5		P=0.329	
POLY 6		P=0.329	
COCH-ARM / FISHERS		P=0.325	
MAX-ISO-POLY-3		P=0.188	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males
DOSE	0 mg/mL male	10 mg/mL male
Nose: Respiratory Epithelium Inflammation		
LESION RATES		
OVERALL (a)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE		
STATISTICAL TESTS		
POLY 3		(n)
POLY 1.5		(n)
POLY 6		(n)
COCH-ARM / FISHERS		(n)
MAX-ISO-POLY-3		(n)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:12

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Nose: Respiratory Epitheliun	n		
Metaplasia			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males	
DOSE	0 mg/mL male	10 mg/mL male	
Nose: Transitional Epithelium Inflammation			
LESION RATES			
OVERALL (a)	0/10 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	
TERMINAL (d)	0/10 (0%)	0/10 (0%)	
FIRST INCIDENCE			
STATISTICAL TESTS			
POLY 3		(n)	
POLY 1.5		(n)	
POLY 6		(n)	
COCH-ARM / FISHERS		(n)	
MAX-ISO-POLY-3		(n)	

Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Pancreas Infiltration Cellular Mononuc	cloar Coll	
	Clear Cell	
LESION RATES		
OVERALL (a)	0/10 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	1/10.00
POLY-3 PERCENT (g)	0%	10%
TERMINAL (d)	0/10 (0%)	1/10 (10%)
FIRST INCIDENCE		92 (T)
STATISTICAL TESTS		
POLY 3		P=0.500
POLY 1.5		P=0.500
POLY 6		P=0.500
COCH-ARM / FISHERS		P=0.500
MAX-ISO-POLY-3		P=0.158

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		ı	Males	
DOSE	0 mg/mL male	10 mg/mL male		
Pancreas: Acinus Atrophy				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/10 (0%)		
POLY-3 RATE (b)	1/10.00	0/10.00		
POLY-3 PERCENT (g)	10%	0%		
TERMINAL (d)	1/10 (10%)	0/10 (0%)		
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3		P=0.500N		
POLY 1.5		P=0.500N		
POLY 6		P=0.500N		
COCH-ARM / FISHERS		P=0.500N		
MAX-ISO-POLY-3		P=0.158N		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Males
DOSE	0 mg/mL male	10 mg/mL male	
Pituitary Gland: Pars Distalis	S		
Cyst			
LESION RATES			
OVERALL (a)	0/10 (0%)	1/10 (10%)	
POLY-3 RATE (b)	0/10.00	1/10.00	
POLY-3 PERCENT (g)	0%	10%	
TERMINAL (d)	0/10 (0%)	1/10 (10%)	
FIRST INCIDENCE		92 (T)	
STATISTICAL TESTS			
POLY 3		P=0.500	
POLY 1.5		P=0.500	
POLY 6		P=0.500	
COCH-ARM / FISHERS		P=0.500	
MAX-ISO-POLY-3		P=0.158	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Males	
DOSE	0 mg/mL male	10 mg/mL male		
Preputial Gland				
Inflammation Chronic				
LESION RATES				
OVERALL (a)	2/10 (20%)	0/10 (0%)		
POLY-3 RATE (b)	2/10.00	0/10.00		
POLY-3 PERCENT (g)	20%	0%		
TERMINAL (d)	2/10 (20%)	0/10 (0%)		
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3		P=0.227N		
POLY 1.5		P=0.227N		
POLY 6		P=0.227N		
COCH-ARM / FISHERS		P=0.237N		
MAX-ISO-POLY-3		P=0.066N		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

		Males
DOSE	0 mg/mL male	10 mg/mL male
Stomach, Forestomach Cyst		
LESION RATES		
OVERALL (a)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE		
STATISTICAL TESTS		
POLY 3		(n)
POLY 1.5		(n)
POLY 6		(n)
COCH-ARM / FISHERS		(n)
MAX-ISO-POLY-3		(n)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Stomach, Glandular Mineral		
wiinerai		
LESION RATES		
OVERALL (a)	0/10 (0%)	3/10 (30%)
POLY-3 RATE (b)	0/10.00	3/10.00
POLY-3 PERCENT (g)	0%	30%
TERMINAL (d)	0/10 (0%)	3/10 (30%)
FIRST INCIDENCE		92 (T)
STATISTICAL TESTS		
POLY 3		P=0.095
POLY 1.5		P=0.095
POLY 6		P=0.095
COCH-ARM / FISHERS		P=0.105
MAX-ISO-POLY-3		P=0.025*

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

DOSE	0 mg/mL male	10 mg/mL male
Thymus		
Atrophy		
LESION RATES		
OVERALL (a)	0/10 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	1/10.00
POLY-3 PERCENT (g)	0%	10%
TERMINAL (d)	0/10 (0%)	1/10 (10%)
FIRST INCIDENCE		92 (T)
STATISTICAL TESTS		
POLY 3		P=0.500
POLY 1.5		P=0.500
POLY 6		P=0.500
COCH-ARM / FISHERS		P=0.500
MAX-ISO-POLY-3		P=0.158

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Adrenal Cortex Hypertrophy Focal				
LESION RATES				
OVERALL (a)	2/10 (20%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	2/10.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	20%	0%	10%	
TERMINAL (d)	2/10 (20%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.475N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.275N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Adrenal Cortex: Bilateral Hypertrophy Focal				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	1/10.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	10%	0%	10%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.760	
POLY 1.5	(e)	(e)	P=0.760	
POLY 6	(e)	(e)	P=0.760	
COCH-ARM / FISHERS	P=0.749	(e)	P=0.763N	
MAX-ISO-POLY-3	(e)	(e)	P=1.000	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Clitoral Gland Inflammation Chronic				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Eye: Retina Dysplasia				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Harderian Gland Infiltration Cellular Lymphoc	ryte			
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Harderian Gland Infiltration Cellular Mononuc	cloar Call			
- Innitiation Central Monorius	Clear Cell			
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Heart				
Cardiomyopathy				
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Heart: Valve Fibrosis				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Kidney				
Infiltration Cellular Mononuc	clear Cell			
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Kidney	•			
Nephropathy Chronic Progre	essive			
LESION RATES				
OVERALL (a)	4/10 (40%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	4/10.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	40%	0%	10%	
TERMINAL (d)	4/10 (40%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.148N	
POLY 1.5	(e)	(e)	P=0.148N	
POLY 6	(e)	(e)	P=0.148N	
COCH-ARM / FISHERS	P=0.139N	(e)	P=0.152N	
MAX-ISO-POLY-3	(e)	(e)	P=0.058N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Liver Clear Cell Focus				
- Clear Gen i Gods				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/1 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/1.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/1 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	P=0.476N	P=0.913N	P=0.500N	
POLY 1.5	P=0.476N	P=0.913N	P=0.500N	
POLY 6	P=0.476N	P=0.913N	P=0.500N	
COCH-ARM / FISHERS	P=0.474N	P=0.909N	P=0.500N	
MAX-ISO-POLY-3	P=0.232N	P=0.410N	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Liver				
Hepatodiaphragmatic Nodule				
LESION RATES				
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	1/1.00	0/10.00	
POLY-3 PERCENT (g)	0%	100%	0%	
TERMINAL (d)	0/10 (0%)	1/1 (100%)	0/10 (0%)	
FIRST INCIDENCE		92 (T)		
STATISTICAL TESTS				
POLY 3	P=0.557N	P=0.091	(e)	
POLY 1.5	P=0.557N	P=0.091	(e)	
POLY 6	P=0.557N	P=0.091	(e)	
COCH-ARM / FISHERS	P=0.557N	P=0.091	(e)	
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Liver Infiltration Cellular Mixed Ce	ili			
LESION RATES				
OVERALL (a)	2/10 (20%)	0/1 (0%)	2/10 (20%)	
POLY-3 RATE (b)	2/10.00	0/1.00	2/10.00	
POLY-3 PERCENT (g)	20%	0%	20%	
TERMINAL (d)	2/10 (20%)	0/1 (0%)	2/10 (20%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	P=0.652	P=0.786N	P=0.702	
POLY 1.5	P=0.652	P=0.786N	P=0.702	
POLY 6	P=0.652	P=0.786N	P=0.702	
COCH-ARM / FISHERS	P=0.663	P=0.818N	P=0.709N	
MAX-ISO-POLY-3	P=0.621	P=0.367N	P=1.000	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Lung Infiltration Cellular Histiocyte				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	1/10 (10%)	
POLY-3 RATE (b)	1/10.00	0/0.00	1/10.00	
POLY-3 PERCENT (g)	10%	0%	10%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	1/10 (10%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.760	
POLY 1.5	(e)	(e)	P=0.760	
POLY 6	(e)	(e)	P=0.760	
COCH-ARM / FISHERS	P=0.749	(e)	P=0.763N	
MAX-ISO-POLY-3	(e)	(e)	P=1.000	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Lung Inflammation Chronic				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female
Lymph Node: Mediastinal Hemorrhage			
LESION RATES			
OVERALL (a)	1/1 (100%)	0/0 (0%)	0/0 (0%)
POLY-3 RATE (b)	1/1.00	0/0.00	0/0.00
POLY-3 PERCENT (g)	100%	0%	0%
TERMINAL (d)	1/1 (100%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	92 (T)		
STATISTICAL TESTS			
POLY 3	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Nose: Goblet Cell, Respirato Hyperplasia	ory Epithelium			
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Nose: Olfactory Epithelium Accumulation, Hyaline Droplet				
LESION RATES				
OVERALL (a)	7/10 (70%)	0/0 (0%)	7/10 (70%)	
POLY-3 RATE (b)	7/10.00	0/0.00	7/10.00	
POLY-3 PERCENT (g)	70%	0%	70%	
TERMINAL (d)	7/10 (70%)	0/0 (0%)	7/10 (70%)	
FIRST INCIDENCE	92 (T)		92 (T)	
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.678	
POLY 1.5	(e)	(e)	P=0.678	
POLY 6	(e)	(e)	P=0.678	
COCH-ARM / FISHERS	P=0.670	(e)	P=0.686N	
MAX-ISO-POLY-3	(e)	(e)	P=1.000	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

			Females	
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Nose: Respiratory Epithelium Inflammation				
LESION RATES				
OVERALL (a)	3/10 (30%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	3/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	30%	0%	0%	
TERMINAL (d)	3/10 (30%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.095N	
POLY 1.5	(e)	(e)	P=0.095N	
POLY 6	(e)	(e)	P=0.095N	
COCH-ARM / FISHERS	P=0.094N	(e)	P=0.105N	
MAX-ISO-POLY-3	(e)	(e)	P=0.025N*	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Nose: Respiratory Epithelium Metaplasia				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Nose: Transitional Epithelium Inflammation				
LESION RATES				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	1/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	10%	0%	0%	
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE	92 (T)			
STATISTICAL TESTS				
POLY 3	(e)	(e)	P=0.500N	
POLY 1.5	(e)	(e)	P=0.500N	
POLY 6	(e)	(e)	P=0.500N	
COCH-ARM / FISHERS	P=0.459N	(e)	P=0.500N	
MAX-ISO-POLY-3	(e)	(e)	P=0.159N	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females					
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female		
Pancreas Infiltration Cellular Mononuc	clear Cell				
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)		
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00		
POLY-3 PERCENT (g)	0%	0%	0%		
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)		
FIRST INCIDENCE					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)		
COCH-ARM / FISHERS	(n)	(n)	(n)		
MAX-ISO-POLY-3	(n)	(n)	(n)		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

	Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female		
Pancreas: Acinus Atrophy					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)		
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00		
POLY-3 PERCENT (g)	0%	0%	0%		
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)		
FIRST INCIDENCE					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)		
POLY 1.5	(n)	(n)	(n)		
POLY 6	(n)	(n)	(n)		
COCH-ARM / FISHERS	(n)	(n)	(n)		
MAX-ISO-POLY-3	(n)	(n)	(n)		

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Pituitary Gland: Pars Distalis Cyst				
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Stomach, Forestomach Cyst				
LESION RATES				
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	1/1.00	0/10.00	
POLY-3 PERCENT (g)	0%	100%	0%	
TERMINAL (d)	0/10 (0%)	1/1 (100%)	0/10 (0%)	
FIRST INCIDENCE		92 (T)		
STATISTICAL TESTS				
POLY 3	P=0.557N	P=0.091	(e)	
POLY 1.5	P=0.557N	P=0.091	(e)	
POLY 6	P=0.557N	P=0.091	(e)	
COCH-ARM / FISHERS	P=0.557N	P=0.091	(e)	
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Stomach, Glandular Mineral				
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

Females				
DOSE	0 mg/mL female	1 mg/mL female	10 mg/mL female	
Thymus Atrophy				
LESION RATES				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
POLY-3 RATE (b)	0/10.00	0/0.00	0/10.00	
POLY-3 PERCENT (g)	0%	0%	0%	
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/10 (0%)	
FIRST INCIDENCE				
STATISTICAL TESTS				
POLY 3	(n)	(n)	(n)	
POLY 1.5	(n)	(n)	(n)	
POLY 6	(n)	(n)	(n)	
COCH-ARM / FISHERS	(n)	(n)	(n)	
MAX-ISO-POLY-3	(n)	(n)	(n)	

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

CAS Number: 65039-09-0

Date Report Requested: 01/08/2020 Time Report Requested: 11:06:12 First Dose M/F: 05/09/13 / 05/10/13

Lab: BAT

LEGEND

(a)	Number of tumor-bearing animals/number of animals examined at site.

- (b) Number of tumor-bearing animals/Poly-3 number
- (d) Observed incidence at terminal kill.
- (e) Value of statistic cannot be computed.
- (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to
 - pairwise comparisons between the controls and that dosed group.
- (g) Poly-3 adjusted lifetime tumor incidence.
- (n) No statistics are calculated if all dose groups have fewer than two tumors.
- (I) Interim sacrifice
- (T) Terminal sacrifice
- # Tumor rates based on numbers of animals necropsied.
- * To the right of any statistical result, indicates significance at (P<=0.05).</p>
- ** To the right of any statistical result, indicates significance at (P<=0.01).
- N Indicates a negative trend for all tests
 - The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

*** END OF REPORT ***