

**Experiment Number:** 50051 - 01  
**Test Type:** 14-WEEK  
**Route:** DOSED WATER  
**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020  
**Time Report Requested:** 11:04:53  
**First Dose M/F:** 08/22/13 / 08/23/13  
**Lab:** BAT

Final\_1 - BMPY Rats

**NTP Study Number:** C05051  
**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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CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 501

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307066

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Testis
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**OBSERVATIONS**

* Adrenal Cortex		Hypertrophy	Focal, Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Preputial Gland		Inflammation	Chronic Active, Mild
* Stomach, Glandular		Dilation	Minimal

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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 502

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307067

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lymph Node, Mandibular    | * Lymph Node, Mesenteric |
| * Mammary Gland            | * Nose                    | * Pancreas                  | * Parathyroid Gland      |
| * Pituitary Gland          | * Preputial Gland         | * Prostate                  | * Salivary Glands        |
| * Seminal Vesicle          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Testis                  | * Thymus                    | * Thyroid Gland          |
| * Trachea                  | * Urinary Bladder         |                             |                          |

OBSERVATIONS

- |          |                              |                         |
|----------|------------------------------|-------------------------|
| * Kidney | Nephropathy                  | Chronicprogr, Mild      |
| * Liver  | Extramedullary Hematopoiesis | Minimal                 |
|          | Inflammation                 | Chronic Active, Minimal |
| * Lung   | Infiltration Cellular        | Histiocyte, Minimal     |

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Species/Strain: RATS/HSD

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Date Report Requested: 01/08/2020

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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 503

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307068

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis             | * Esophagus                |
| * Eye                     | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Liver                     | * Lung                   | * Lymph Node, Mandibular   |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Pancreas               | * Pituitary Gland          |
| * Preputial Gland         | * Prostate                  | * Salivary Glands        | * Seminal Vesicle          |
| * Skin                    | * Spleen                    | * Stomach, Forestomach   | * Stomach, Glandular       |
| * Testis                  | * Thymus                    | * Thyroid Gland          | * Trachea                  |
| * Urinary Bladder         |                             |                          |                            |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |                   |               |                               |                         |
|-------------------|---------------|-------------------------------|-------------------------|
| * Harderian Gland |               | Inflammation                  | Chronic Active, Minimal |
| * Kidney          |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Nose            | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |

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Species/Strain: RATS/HSD

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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 504

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307069

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Preputial Gland        |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                   |
| * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Testis                 |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |

OBSERVATIONS

\* Kidney

Nephropathy

Chronicprogr, Minimal

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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 505

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Liver                   | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Pancreas               |
| * Parathyroid Gland        | * Pituitary Gland         | * Preputial Gland           | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testis                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

OBSERVATIONS

- |                      |             |                       |
|----------------------|-------------|-----------------------|
| * Islets, Pancreatic | Hyperplasia | Minimal               |
| * Kidney             | Nephropathy | Chronicprogr, Minimal |

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Species/Strain: RATS/HSD

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Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 506

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307071

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Pancreas                  | * Pituitary Gland        |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                   |
| * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Testis                 |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |

MISSING

- \* Parathyroid Gland

OBSERVATIONS

- |                   |               |                               |                         |
|-------------------|---------------|-------------------------------|-------------------------|
| * Kidney          |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Liver           |               | Extramedullary Hematopoiesis  | Minimal                 |
|                   |               | Inflammation                  | Chronic Active, Minimal |
| * Nose            | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |
| * Preputial Gland |               | Inflammation                  | Chronic Active, Minimal |

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Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 507

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307072

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Pancreas                 | * Pituitary Gland         | * Preputial Gland           | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testis                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |          |             |                       |
|----------|-------------|-----------------------|
| * Kidney | Nephropathy | Chronicprogr, Minimal |
|----------|-------------|-----------------------|



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Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
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Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 508

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307073

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Pancreas               |
| * Pituitary Gland          | * Prostate                | * Salivary Glands           | * Seminal Vesicle        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Testis                   | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          |                           |                             |                          |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |                   |               |                               |                         |
|-------------------|---------------|-------------------------------|-------------------------|
| * Kidney          |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Nose            | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |
| * Preputial Gland |               | Inflammation                  | Chronic Active, Minimal |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
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First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 509

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307074

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testis	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Kidney	Nephropathy	Chronicprogr, Minimal
* Preputial Gland	Inflammation	Chronic Active, Mild

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
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CAS Number: 479500-35-1

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Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 510

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307075

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Epididymis             | * Esophagus                |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Liver                     | * Lung                   | * Lymph Node, Mandibular   |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   | * Parathyroid Gland        |
| * Pituitary Gland         | * Preputial Gland           | * Prostate               | * Salivary Glands          |
| * Seminal Vesicle         | * Skin                      | * Spleen                 | * Stomach, Forestomach     |
| * Stomach, Glandular      | * Testis                    | * Thymus                 | * Thyroid Gland            |
| * Trachea                 | * Urinary Bladder           |                          |                            |

OBSERVATIONS

- |            |        |             |                       |
|------------|--------|-------------|-----------------------|
| * Eye      | Retina | Dysplasia   | Minimal               |
| * Kidney   |        | Nephropathy | Chronicprogr, Minimal |
| * Pancreas |        | Atrophy     | Minimal               |

**Experiment Number:** 50051 - 01

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**Species/Strain:** RATS/HSD

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**Lab:** BAT

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**ANIMAL ID:** 511

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307076

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
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**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

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**ANIMAL ID:** 512

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307077

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
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**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

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**ANIMAL ID:** 513

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307078

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 514

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307079

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Testis

**OBSERVATIONS**

Kidney

Pelvis

Dilation

Mild

Inflammation

Chronic Active, Mild

Nephropathy

Chronicprogr, Minimal

[ Dilation TGLs = 2-18 ]

Liver

Hepatodiaphragmatic Nodule

[ Hepatodiaphragmatic Nodule TGLs = 5-19 ]

Ureter

Inflammation

Chronic Active, Mild

[ Inflammation TGLs = 1-17 ]

Urinary Bladder

Urothelium

Hyperplasia

Moderate

Inflammation

Chronic Active, Moderate

Note: [TGLs=3-NCL]

[ Hyperplasia TGLs = 4-8 ]

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**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 515

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307080

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION



**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
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**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

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**ANIMAL ID:** 516

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307081

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

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**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 517

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307082

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 518

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307083

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 519

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307084

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 520

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 0.3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307085

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 521

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307086

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 522

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307087

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 523

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307088

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION



**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 524

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307089

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 525

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307090

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 526

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307091

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 527

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307092

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 528

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307093

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 529

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307094

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 530

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307095

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 531

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307096

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Pancreas               |
| * Parathyroid Gland        | * Pituitary Gland         | * Preputial Gland           | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testis                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

OBSERVATIONS

- |          |               |                               |                       |
|----------|---------------|-------------------------------|-----------------------|
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal               |



Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 532

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307097

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Kidney                  | * Liver                     | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Parathyroid Gland         | * Pituitary Gland        |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                   |
| * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Testis                 |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |

OBSERVATIONS

- |                      |               |                               |                         |
|----------------------|---------------|-------------------------------|-------------------------|
| * Islets, Pancreatic |               | Hyperplasia                   | Minimal                 |
| * Lung               |               | Inflammation                  | Chronic Active, Minimal |
| * Nose               | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |
| * Pancreas           |               | Basophilic Focus              |                         |
| * Preputial Gland    |               | Infiltration Cellular         | Mononuclear CI, Minimal |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 533

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL male

**DISP:** Terminal Sacrifice

**HISTO:** 1307098

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Pancreas               |
| * Parathyroid Gland        | * Pituitary Gland         | * Preputial Gland           | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testis                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

**OBSERVATIONS**

- |          |              |                         |
|----------|--------------|-------------------------|
| * Kidney | Nephropathy  | Chronicprogr, Minimal   |
| * Lung   | Inflammation | Chronic Active, Minimal |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 534

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307099

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Pituitary Gland          | * Preputial Gland         | * Prostate                  | * Salivary Glands        |
| * Seminal Vesicle          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Testis                  | * Thymus                    | * Thyroid Gland          |
| * Trachea                  | * Urinary Bladder         |                             |                          |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |            |        |             |                       |
|------------|--------|-------------|-----------------------|
| * Kidney   |        | Nephropathy | Chronicprogr, Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal               |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 535

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307100

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Pancreas                  | * Parathyroid Gland      |
| * Pituitary Gland          | * Preputial Gland         | * Prostate                  | * Salivary Glands        |
| * Seminal Vesicle          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Testis                  | * Thymus                    | * Thyroid Gland          |
| * Trachea                  | * Urinary Bladder         |                             |                          |

OBSERVATIONS

- |          |               |                               |                         |
|----------|---------------|-------------------------------|-------------------------|
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Liver  |               | Inflammation                  | Chronic Active, Minimal |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 536

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307101

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testis	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**OBSERVATIONS**

* Kidney	Nephropathy	Chronicprogr, Minimal
* Liver	Inflammation	Chronic Active, Minimal

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 537

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307102

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testis
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**OBSERVATIONS**

\* Kidney

Nephropathy

Chronicprogr, Minimal

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 538

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307103

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Liver                   | * Lymph Node, Mandibular    | * Lymph Node, Mesenteric |
| * Mammary Gland            | * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        |
| * Preputial Gland          | * Prostate                | * Salivary Glands           | * Seminal Vesicle        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Testis                   | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          |                           |                             |                          |

OBSERVATIONS

- |                      |               |                               |                       |
|----------------------|---------------|-------------------------------|-----------------------|
| * Islets, Pancreatic |               | Hyperplasia                   | Minimal               |
| * Kidney             |               | Nephropathy                   | Chronicprogr, Minimal |
| * Lung               |               | Infiltration Cellular         | Histiocyte, Minimal   |
| * Nose               | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal               |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 539

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307104

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Testis                    | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |                          |

OBSERVATIONS

- |                   |         |  |   |
|-------------------|---------|--|---|
| * Kidney          | Papilla | Mineral<br>Nephropathy<br>Inflammation | Minimal<br>Chronicprogr, Minimal<br>Chronic Active, Minimal |
| * Preputial Gland |         |  |   |



Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 540

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 3 mg/mL male

DISP: Terminal Sacrifice

HISTO: 1307105

ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Epididymis                | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Pancreas                  | * Pituitary Gland        |
| * Preputial Gland          | * Prostate                | * Salivary Glands           | * Seminal Vesicle        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Testis                   | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          |                           |                             |                          |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |          |               |                               |                       |
|----------|---------------|-------------------------------|-----------------------|
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal |
| * Liver  |               | Extramedullary Hematopoiesis  | Minimal               |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal               |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 541

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307116

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Ovary                  |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |
| * Uterus                   |                           |                             |                          |

OBSERVATIONS

- |         |               |                               |                         |
|---------|---------------|-------------------------------|-------------------------|
| * Liver |               | Inflammation                  | Chronic Active, Minimal |
| * Nose  | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 542

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Ovary                  |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |
| * Uterus                   |                           |                             |                          |

OBSERVATIONS

- |          |                              |                       |
|----------|------------------------------|-----------------------|
| * Kidney | Nephropathy                  | Chronicprogr, Minimal |
| * Liver  | Extramedullary Hematopoiesis | Minimal               |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 543

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307118

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Ovary                    | * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        |
| * Salivary Glands          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          | * Uterus                  |                             |                          |

**OBSERVATIONS**

- |         |              |                         |
|---------|--------------|-------------------------|
| * Liver | Inflammation | Chronic Active, Minimal |
|---------|--------------|-------------------------|

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 544

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307119

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**OBSERVATIONS**

* Clitoral Gland	Infiltration Cellular	Mononuclear CI, Minimal
------------------	-----------------------	-------------------------

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 545

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Liver                     | * Lung                   | * Lymph Node, Mandibular   |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   | * Ovary                    |
| * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands        | * Skin                     |
| * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   |
| * Thyroid Gland           | * Trachea                   | * Urinary Bladder        | * Uterus                   |

OBSERVATIONS

- |                  |        |                       |                         |
|------------------|--------|-----------------------|-------------------------|
| * Clitoral Gland |        | Infiltration Cellular | Mononuclear CI, Minimal |
| * Kidney         |        | Nephropathy           | Chronicprogr, Minimal   |
| * Pancreas       | Acinus | Atrophy               | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 546

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307121

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Lymph Node, Mandibular    | * Lymph Node, Mesenteric | * Mammary Gland            |
| * Ovary                   | * Pancreas                  | * Parathyroid Gland      | * Pituitary Gland          |
| * Salivary Glands         | * Skin                      | * Spleen                 | * Stomach, Forestomach     |
| * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          | * Trachea                  |
| * Urinary Bladder         | * Uterus                    |                          |                            |

OBSERVATIONS

- |                  |               |                               |                         |
|------------------|---------------|-------------------------------|-------------------------|
| * Clitoral Gland |               | Infiltration Cellular         | Mononuclear CI, Minimal |
| * Kidney         |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Liver          |               | Inflammation                  | Chronic Active, Minimal |
| * Lung           |               | Inflammation                  | Chronic Active, Minimal |
| * Nose           | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 547

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307122

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Liver                   | * Lymph Node, Mandibular    | * Lymph Node, Mesenteric | * Ovary                    |
| * Pancreas                | * Pituitary Gland           | * Salivary Glands        | * Skin                     |
| * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   |
| * Thyroid Gland           | * Trachea                   | * Urinary Bladder        | * Uterus                   |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |                      |               |                               |                         |
|----------------------|---------------|-------------------------------|-------------------------|
| * Clitoral Gland     |               | Inflammation                  | Chronic Active, Mild    |
| * Islets, Pancreatic |               | Hyperplasia                   | Minimal                 |
| * Kidney             |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Lung               |               | Inflammation                  | Chronic Active, Minimal |
| * Mammary Gland      | Duct          | Dilation                      | Mild                    |
| * Nose               | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |



Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 548

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Ovary                  |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |
| * Uterus                   |                           |                             |                          |

OBSERVATIONS

- |          |              |                         |
|----------|--------------|-------------------------|
| * Kidney | Nephropathy  | Chronicprogr, Minimal   |
| * Lung   | Inflammation | Chronic Active, Minimal |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 549

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307124

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Liver                  |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Ovary                    | * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        |
| * Salivary Glands          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          | * Uterus                  |                             |                          |

**OBSERVATIONS**

- |        |              |                         |
|--------|--------------|-------------------------|
| * Lung | Inflammation | Chronic Active, Minimal |
|--------|--------------|-------------------------|

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 550

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 0 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307125

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla         | Blood Vessel                | * Bone                   | * Bone Marrow              |
| * Brain                   | * Clitoral Gland            | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Kidney                    | * Lung                   | * Lymph Node, Mandibular   |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   | * Ovary                    |
| * Pancreas                | * Pituitary Gland           | * Salivary Glands        | * Skin                     |
| * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   |
| * Thyroid Gland           | * Trachea                   | * Urinary Bladder        | * Uterus                   |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |                  |           |              |                         |
|------------------|-----------|--------------|-------------------------|
| * Adrenal Cortex | Bilateral | Hypertrophy  | Focal, Mild             |
| * Liver          |           | Inflammation | Chronic Active, Minimal |

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

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**ANIMAL ID:** 551

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307126

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 552

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307127

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 553

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307128

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 554

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307129

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\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 555

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307130

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION



**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 556

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307131

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 557

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307132

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 558

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307133

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 559

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307134

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 560

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307135

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 561

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307136

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 562

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307137

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 563

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307138

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION



**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 564

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307139

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 565

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307140

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 566

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307141

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 567

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307142

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 568

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307143

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 569

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307144

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

**Experiment Number:** 50051 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
**CAS Number:** 479500-35-1

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:04:53

**First Dose M/F:** 08/22/13 / 08/23/13

**Lab:** BAT

---

**ANIMAL ID:** 570

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 3 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307145

---

\*\*\* NECROPSIED - NO MICROSCOPIC EXAMINATION

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 571

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 6 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307146

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**OBSERVATIONS**

* Kidney	Nephropathy	Chronicprogr, Minimal
* Liver	Inflammation	Chronic Active, Minimal
* Lung	Inflammation	Chronic Active, Minimal



Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 572

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 6 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307147

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Ovary                  |
| * Pancreas                 | * Parathyroid Gland       | * Pituitary Gland           | * Salivary Glands        |
| * Skin                     | * Spleen                  | * Stomach, Forestomach      | * Stomach, Glandular     |
| * Thymus                   | * Thyroid Gland           | * Trachea                   | * Urinary Bladder        |
| * Uterus                   |                           |                             |                          |

OBSERVATIONS

- |         |  |                            |                         |
|---------|--|----------------------------|-------------------------|
| * Liver |  | Hepatodiaphragmatic Nodule |                         |
|         | [ Hepatodiaphragmatic Nodule TGLs = 1-16 ] |                            |                         |
| * Lung  |  | Inflammation               | Chronic Active, Minimal |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 573

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 6 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307148

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Ovary                  |
| * Pancreas                 | * Pituitary Gland         | * Salivary Glands           | * Skin                   |
| * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           | * Uterus                 |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |          |               |                               |                       |
|----------|---------------|-------------------------------|-----------------------|
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal               |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

---

ANIMAL ID: 574

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 6 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307149

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

---

**MISSING**

\* Parathyroid Gland

---

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 575

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 6 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307150

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**OBSERVATIONS**

* Islets, Pancreatic	Hyperplasia	Minimal
* Kidney	Nephropathy	Chronicprogr, Minimal

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 576

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 6 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307151

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone                     |
| * Bone Marrow             | * Brain                     | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Liver                     | * Lung                   | * Lymph Node, Mandibular   |
| * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   | * Ovary                    |
| * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        | * Salivary Glands          |
| * Skin                    | * Spleen                    | * Stomach, Forestomach   | * Stomach, Glandular       |
| * Thymus                  | * Thyroid Gland             | * Trachea                | * Urinary Bladder          |
| * Uterus                  |                             |                          |                            |

**OBSERVATIONS**

- |                  |              |                       |                         |
|------------------|--------------|-----------------------|-------------------------|
| * Clitoral Gland |              | Infiltration Cellular | Mononuclear CI, Minimal |
| * Kidney         | Renal Tubule | Mineral               | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 577

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 6 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307152

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Ovary                     | * Pancreas               |
| * Pituitary Gland          | * Salivary Glands         | Skeletal Muscle             | * Skin                   |
| * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        | * Thymus                 |
| * Thyroid Gland            | * Trachea                 | * Urinary Bladder           | * Uterus                 |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |          |               |                               |                         |
|----------|---------------|-------------------------------|-------------------------|
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Liver  |               | Inflammation                  | Chronic Active, Minimal |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 578

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 6 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307153

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Liver                     | * Lung                   |
| * Lymph Node, Mandibular   | * Lymph Node, Mesenteric  | * Mammary Gland             | * Nose                   |
| * Ovary                    | * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        |
| * Salivary Glands          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          | * Uterus                  |                             |                          |

**OBSERVATIONS**

- |          |             |                       |
|----------|-------------|-----------------------|
| * Kidney | Nephropathy | Chronicprogr, Minimal |
|----------|-------------|-----------------------|

Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

**ANIMAL ID:** 579

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 6 mg/mL female

**DISP:** Terminal Sacrifice

**HISTO:** 1307154

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla           | Blood Vessel             | * Bone Marrow              |
| * Brain                   | * Clitoral Gland            | * Esophagus              | * Eye                      |
| * Harderian Gland         | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Lung                      | * Lymph Node, Mandibular | * Lymph Node, Mesenteric   |
| * Mammary Gland           | * Ovary                     | * Pancreas               | * Pituitary Gland          |
| * Salivary Glands         | * Skin                      | * Spleen                 | * Stomach, Forestomach     |
| * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          | * Trachea                  |
| * Urinary Bladder         | * Uterus                    |                          |                            |

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- |          |               |                               |                         |
|----------|---------------|-------------------------------|-------------------------|
| * Bone   | Maxilla       | Inflammation                  | Chronic Active, Mild    |
| * Kidney |               | Nephropathy                   | Chronicprogr, Minimal   |
| * Liver  |               | Inflammation                  | Chronic Active, Minimal |
| * Nose   | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal                 |
| Tooth    |               | Necrosis                      | Mild                    |



Experiment Number: 50051 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride  
CAS Number: 479500-35-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:04:53

First Dose M/F: 08/22/13 / 08/23/13

Lab: BAT

ANIMAL ID: 580

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 6 mg/mL female

DISP: Terminal Sacrifice

HISTO: 1307155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Adrenal Medulla         | Blood Vessel                | * Bone                   |
| * Bone Marrow              | * Brain                   | * Clitoral Gland            | * Esophagus              |
| * Eye                      | * Harderian Gland         | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Kidney                    | * Liver                  |
| * Lung                     | * Lymph Node, Mandibular  | * Lymph Node, Mesenteric    | * Mammary Gland          |
| * Ovary                    | * Pancreas                | * Parathyroid Gland         | * Pituitary Gland        |
| * Salivary Glands          | * Skin                    | * Spleen                    | * Stomach, Forestomach   |
| * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             | * Trachea                |
| * Urinary Bladder          | * Uterus                  |                             |                          |

OBSERVATIONS

- |        |               |                               |         |
|--------|---------------|-------------------------------|---------|
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
|--------|---------------|-------------------------------|---------|

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