

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

|                             |        |
|-----------------------------|--------|
| <b>C Number:</b>            | C55050 |
| <b>Cage Range:</b>          | All    |
| <b>Date Range:</b>          | All    |
| <b>Reasons For Removal:</b> | All    |
| <b>Removal Date Range:</b>  | All    |
| <b>Treatment Groups:</b>    | All    |
| <b>Study Gender:</b>        | Male   |

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_001

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Lymph node

Mesenteric Lymph Node

Hemorrhage

Spleen

Red Pulp

Hematopoiesis

Thymus

Depletion, Lymphoid

Unspecified

Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_002

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|             |                       |                            |
|-------------|-----------------------|----------------------------|
| Bone marrow |                       | Hyperplasia, Granulocytic  |
| Brain       | Thalamus              | Mineralization             |
| Kidney      |                       | Inflammation, Interstitial |
| Liver       |                       | Hematopoiesis              |
|             | Hepatocytes           | Necrosis, Focal            |
| Lymph node  | Mesenteric Lymph Node | Inflammation, Acute Focal  |
| Spleen      | Red Pulp              | Hematopoiesis              |
| Stomach     | Fundus                | Inflammation, Acute Focal  |
| Unspecified | Leg                   | Sarcoma, Nos               |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_003

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                       |                            |
|---------------|-----------------------|----------------------------|
| Adrenal gland | Capsule               | Hyperplasia, Focal         |
| Brain         | Thalamus              | Mineralization             |
| Epididymis    |                       | Granuloma, Spermatic       |
| Liver         |                       | Hepatocellular Carcinoma   |
| Lymph node    | Mesenteric Lymph Node | Inflammation, Acute Focal  |
| Unspecified   | Multiple Organs Nos   | Leukemia, Undifferentiated |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_004

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

|             |          |                                      |
|-------------|----------|--------------------------------------|
| Brain       | Thalamus | Mineralization                       |
| Liver       |          | Hepatocellular Carcinoma             |
| Lung        |          | Hepatocellular Carcinoma, Metastatic |
|             |          | Lymphocytic Inflammatory Infiltrate  |
| Spleen      | Red Pulp | Hematopoiesis                        |
| Unspecified | Back     | Fibroma                              |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_005

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                |                            |
|-----------------|----------------|----------------------------|
| Bone marrow     |                | Hyperplasia, Granulocytic  |
| Heart           | Myocardium Nos | Degeneration, Nos          |
| Intestine Large | Colon          | Parasitism                 |
| Kidney          | Tubule         | Dilatation, Nos            |
| Liver           |                | Angiectasis                |
|                 |                | Hematopoiesis              |
| Lung            |                | Inflammation, Interstitial |
| Spleen          | Red Pulp       | Hematopoiesis              |
| Thymus          |                | Depletion, Lymphoid        |
|                 |                | Thrombosis, Nos            |
| Thyroid         | Follicle       | Cyst, Multiple             |
| Unspecified     | Thorax         | Fibrosarcoma               |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_006

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Capsule

Hyperplasia, Focal

Epididymis

Inflammation, Acute/Chronic

Kidney

Tubule

Regeneration, Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_007

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                          |                             |
|---------------|--------------------------|-----------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal          |
|               | Medulla                  | Hyperplasia, Focal          |
| Epididymis    |                          | Inflammation, Acute/Chronic |
| Gall bladder  |                          | Cyst, Nos                   |
| Kidney        | Tubule                   | Degeneration, Nos           |
| Pancreas      |                          | Inflammation, Acute/Chronic |
| Skin          | Dermis                   | Inflammation, Acute Focal   |
| Spleen        | Follicles                | Hyperplasia, Lymphoid       |
| Testis        | Spermatogenic Epithelium | Mineralization              |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_008

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |               |                           |
|-----------------|---------------|---------------------------|
| Adrenal gland   | Cortex Nos    | Focal Cellular Change     |
|                 | Capsule       | Hyperplasia, Focal        |
|                 | Medulla       | Hyperplasia, Focal        |
| Brain           | Thalamus      | Mineralization            |
| Epididymis      |               | Mineralization            |
| Intestine Small | Mesentery Nos | Necrosis, Fat             |
| Kidney          | Tubule        | Mineralization            |
|                 | Tubule        | Regeneration, Nos         |
| Liver           |               | Inflammation, Acute Focal |
| Spleen          | Follicles     | Hyperplasia, Lymphoid     |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_009

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |             |                             |
|---------------|-------------|-----------------------------|
| Adrenal gland | Cortex Nos  | Cyst, Nos                   |
| Brain         | Thalamus    | Mineralization              |
| Kidney        | Tubule      | Mineralization              |
| Liver         |             | Hepatocellular Carcinoma    |
| Lung          |             | Congestion, Acute           |
| Pancreas      |             | Inflammation, Acute/Chronic |
| Stomach       | Forestomach | Acanthosis                  |
|               | Forestomach | Hyperkeratosis              |
| Thymus        |             | Depletion, Lymphoid         |
| Unspecified   | Back        | Fibrosarcoma                |

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_010

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Focal Cellular Change

Capsule

Hyperplasia, Focal

Medulla

Pheochromocytoma

Kidney

Tubule

Regeneration, Nos

Lymph node

Mesenteric Lymph Node

Angiectasis

Pancreas

Atrophy, Focal

Spleen

Follicles

Hyperplasia, Lymphoid

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_011

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|          |             |                             |
|----------|-------------|-----------------------------|
| Brain    | Thalamus    | Mineralization              |
| Kidney   | Tubule      | Mineralization              |
| Lung     |             | Congestion, Acute           |
| Prostate |             | Inflammation, Acute/Chronic |
| Thymus   | Lymphocytes | Necrosis, Diffuse           |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_012

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                 |                          |
|-----------------|-----------------|--------------------------|
| Adrenal gland   | Cortex Nos      | Hyperplasia, Focal       |
|                 | Medulla         | Hyperplasia, Focal       |
|                 | Medulla         | Pheochromocytoma         |
| Brain           | Thalamus        | Mineralization           |
| Eye             |                 | Degeneration, Nos        |
| Harderian gland | Hardarian Gland | Papillary Adenocarcinoma |
| Kidney          | Tubule          | Regeneration, Nos        |
| Spleen          | Follicles       | Hyperplasia, Lymphoid    |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_013

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Liver  
Lymph node

Capsule  
Hepatocytes  
Renal Lymph Node  
Renal Lymph Node

Skin  
Spleen  
Thyroid  
Unspecified

Red Pulp

Back

Hyperplasia, Focal  
Necrosis, Focal  
Angiectasis  
Hematopoiesis  
Inflammation, Acute/Chronic  
Hematopoiesis  
Cyst, Follicular Nos  
Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_014

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                          |                              |
|---------------|--------------------------|------------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal           |
|               | Cortex Nos               | Hyperplasia, Focal           |
|               | Medulla                  | Hyperplasia, Focal           |
| Brain         | Thalamus                 | Mineralization               |
| Kidney        | Tubule                   | Regeneration, Nos            |
| Lung          |                          | Alveolar/Bronchiolar Adenoma |
| Lymph node    | Mesenteric Lymph Node    | Angiectasis                  |
|               | Thymic Lymph Node        | Hyperplasia, Lymphoid        |
| Testis        | Spermatogenic Epithelium | Degeneration, Nos            |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_015

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                              |  |
|-----------------|------------------------------|--|
| Adrenal gland   | Medulla                      | Hyperplasia, Focal                                 |
|                 | Medulla                      | Pheochromocytoma                                   |
| Kidney          | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate<br>Nephropathy |
| Liver           |                              | Hepatocellular Carcinoma                           |
| Lung            |                              | Congestion, Acute                                  |
| Lymph node      | Mesenteric Lymph Node        | Angiectasis  |
|                 | Mesenteric Lymph Node        | Hematopoiesis                                      |
| Penis           |                              | Inflammation, Chronic Diffuse                      |
| Preputial gland |                              | Inflammation, Acute/Chronic                        |
| Prostate        |                              | Inflammation, Acute Focal                          |
| Seminal vesicle |                              | Inflammation, Acute Diffuse                        |
| Skin            | Back                         | Acanthosis   |
|                 | Back                         | Hyperkeratosis                                     |
|                 | Perineum                     | Inflammation, Acute/Chronic                        |
| Spleen          | Red Pulp                     | Hematopoiesis                                      |
| Testis          | Spermatogenic Epithelium     | Degeneration, Nos                                  |
| Urinary bladder |                              | Inflammation, Acute/Chronic                        |
|                 | Mucosa                       | Inflammation, Multifocal                           |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_016

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney

Capsule  
Cortical Interstitial Tissue  
Tubule

Hyperplasia, Focal  
Lymphocytic Inflammatory Infiltrate  
Regeneration, Nos

Spleen  
Thyroid

Red Pulp

Hematopoiesis  
Cyst, Follicular Nos

Unspecified

Back

Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_017

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney  
Lymph node  
Spleen  
Thyroid

Capsule  
Cortical Interstitial Tissue  
Mandibular Lymph Node  
Follicles

Hyperplasia, Focal  
Lymphocytic Inflammatory Infiltrate  
Hyperplasia, Lymphoid  
Hyperplasia, Lymphoid  
Cyst, Follicular Nos  
Hyperplasia, Follicular Cell

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_018

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|             |                          |                              |
|-------------|--------------------------|------------------------------|
| Brain       | Thalamus                 | Mineralization               |
| Esophagus   |                          | Inflammation, Acute Diffuse  |
| Heart       | Left Atrium Nos          | Thrombus, Fibrin             |
| Kidney      |                          | Nephropathy                  |
| Liver       |                          | Hepatocellular Carcinoma     |
| Lung        |                          | Congestion, Acute            |
| Testis      | Spermatogenic Epithelium | Atrophy, Diffuse             |
| Thyroid     |                          | Hyperplasia, Follicular Cell |
| Unspecified | Mediastinum Nos          | Inflammation, Acute Diffuse  |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_019

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                       |                          |
|-----------------|-----------------------|--------------------------|
| Adrenal gland   | Medulla               | Hyperplasia, Focal       |
| Intestine Large | Rectum                | Parasitism               |
| Kidney          |                       | Nephropathy              |
| Liver           |                       | Hepatocellular Carcinoma |
| Lymph node      | Pancreatic Lymph Node | Angiectasis              |
|                 | Pancreatic Lymph Node | Hematopoiesis            |
| Skin            | Back                  | Acanthosis               |
|                 | Back                  | Hyperkeratosis           |
| Spleen          | Red Pulp              | Hematopoiesis            |
| Stomach         | Fundal Gland          | Ectopia                  |
| Testis          |                       | Granuloma, Spermatic     |
| Thyroid         |                       | Cyst, Follicular Nos     |

**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_020

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |            |                              |
|---------------|------------|------------------------------|
| Adrenal gland | Cortex Nos | Degeneration, Nos            |
| Brain         | Thalamus   | Mineralization               |
| Lung          |            | Alveolar/Bronchiolar Adenoma |
| Spleen        | Red Pulp   | Hematopoiesis                |
| Thymus        |            | Depletion, Lymphoid          |
| Unspecified   | Back       | Sarcoma, Nos                 |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_021

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Kidney

Tubule

Dilatation, Nos

Nephrosis, Hydro

Lung

Congestion, Acute

Prostate

Inflammation, Acute/Chronic

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_022

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                       |                             |
|---------------|-----------------------|-----------------------------|
| Adrenal gland | Capsule               | Hyperplasia, Focal          |
| Brain         | Thalamus              | Mineralization              |
| Kidney        | Tubule                | Regeneration, Nos           |
| Lymph node    | Mandibular Lymph Node | Hemorrhage                  |
| Pancreas      |                       | Atrophy, Focal              |
| Skin          | Back                  | Acanthosis                  |
|               | Back                  | Fibrosis, Multifocal        |
|               | Back                  | Hyperkeratosis              |
| Tongue        |                       | Acanthosis                  |
|               |                       | Hyperkeratosis              |
|               |                       | Inflammation, Acute/Chronic |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_023

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

|               |                                     |   |
|---------------|-------------------------------------|---|
| Adrenal gland | Cortex Nos<br>Capsule<br>Cortex Nos | Focal Cellular Change<br>Hyperplasia, Focal<br>Hypertrophy, Focal |
| Kidney        | Tubule                              | Regeneration, Nos   |
| Spleen        | Follicles                           | Hyperplasia, Lymphoid   |
| Testis        | Spermatogenic Epithelium            | Atrophy, Focal  |
| Thyroid       |                                     | Cyst, Follicular Nos  |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_024

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Cortex Nos

Degeneration, Nos

Capsule

Hyperplasia, Focal

Medulla

Pheochromocytoma

Kidney

Tubule

Regeneration, Nos

Liver

Cyst, Nos

Spleen

Follicles

Hepatocellular Adenoma

Hyperplasia, Lymphoid

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_025

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |          |                              |
|---------------|----------|------------------------------|
| Adrenal gland | Capsule  | Hyperplasia, Focal           |
| Brain         | Thalamus | Mineralization               |
| Kidney        | Tubule   | Dilatation, Nos              |
| Liver         |          | Hepatocellular Carcinoma     |
|               |          | Necrosis, Coagulative        |
| Lung          |          | Alveolar/Bronchiolar Adenoma |
|               |          | Congestion, Acute            |
| Spleen        | Red Pulp | Hematopoiesis                |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_026

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

|               |          |                              |
|---------------|----------|------------------------------|
| Adrenal gland | Capsule  | Hyperplasia, Focal           |
| Bone marrow   |          | Hyperplasia, Granulocytic    |
| Kidney        | Tubule   | Regeneration, Nos            |
| Lung          |          | Congestion, Acute            |
| Spleen        | Red Pulp | Hematopoiesis                |
| Thymus        |          | Depletion, Lymphoid          |
| Thyroid       |          | Hyperplasia, Follicular Cell |
| Unspecified   | Back     | Sarcoma, Nos                 |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_027

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                              |                                     |
|-----------------|------------------------------|-------------------------------------|
| Adrenal gland   | Capsule                      | Hyperplasia, Focal                  |
|                 | Medulla                      | Hyperplasia, Focal                  |
| Intestine Small | Mesentery Nos                | Necrosis, Fat                       |
| Kidney          | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|                 |                              | Nephropathy                         |
|                 | Tubule                       | Regeneration, Nos                   |
| Liver           |                              | Hepatocellular Carcinoma            |
| Lung            |                              | Congestion, Acute                   |
|                 |                              | Hemorrhage                          |
| Testis          | Spermatogenic Epithelium     | Atrophy, Focal                      |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_028

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Natural Death

**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Spleen  
Thymus  
Unspecified

Capsule  
Red Pulp  
Back

Hyperplasia, Focal  
Hematopoiesis  
Depletion, Lymphoid  
Sarcoma, Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 1\_029

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Capsule

Hyperplasia, Focal

Medulla

Pheochromocytoma

Brain

Thalamus

Mineralization

Kidney

Tubule

Regeneration, Nos

Preputial gland

Abscess, Nos

Thyroid

Cyst, Follicular Nos

Hyperplasia, Follicular Cell

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_030

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                          |                             |
|-----------------|--------------------------|-----------------------------|
| Adrenal gland   | Capsule                  | Hyperplasia, Focal          |
|                 | Medulla                  | Hyperplasia, Focal          |
| Brain           | Thalamus                 | Mineralization              |
| Intestine Large | Colon                    | Parasitism                  |
| Kidney          |                          | Nephropathy                 |
|                 |                          | Nephrosis, Hydro            |
| Liver           |                          | Hepatocellular Carcinoma    |
| Skin            | Dermis                   | Inflammation, Acute/Chronic |
| Spleen          |                          | Hemangiosarcoma             |
|                 | Red Pulp                 | Hematopoiesis               |
| Testis          | Spermatogenic Epithelium | Atrophy, Focal              |
| Thymus          |                          | Depletion, Lymphoid         |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_031

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                          |                           |
|---------------|--------------------------|---------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal        |
| Bone marrow   |                          | Hyperplasia, Granulocytic |
| Liver         |                          | Hematopoiesis             |
| Skin          | Epidermis                | Squamous Cell Papilloma   |
| Spleen        | Red Pulp                 | Hematopoiesis             |
| Testis        | Spermatogenic Epithelium | Atrophy, Focal            |
| Thymus        |                          | Depletion, Lymphoid       |
| Unspecified   | Back                     | Fibrosarcoma              |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_032

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|             |                          |                              |
|-------------|--------------------------|------------------------------|
| Bone marrow |                          | Hyperplasia, Granulocytic    |
| Brain       | Thalamus                 | Mineralization               |
| Liver       |                          | Hepatocellular Adenoma       |
| Lung        |                          | Alveolar Macrophages         |
|             |                          | Alveolar/Bronchiolar Adenoma |
| Lymph node  | Mandibular Lymph Node    | Hyperplasia, Lymphoid        |
| Skin        | Back                     | Inflammation, Acute/Chronic  |
|             | Back                     | Ulcer, Nos                   |
| Spleen      | Red Pulp                 | Hematopoiesis                |
|             | Follicles                | Hyperplasia, Lymphoid        |
| Testis      | Spermatogenic Epithelium | Atrophy, Focal               |
|             |                          | Interstitial-Cell Tumor      |
| Thyroid     |                          | Hyperplasia, Follicular Cell |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_033

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

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**OBSERVATIONS**

|                 |                          |                           |
|-----------------|--------------------------|---------------------------|
| Bone marrow     |                          | Hyperplasia, Granulocytic |
| Brain           | Thalamus                 | Mineralization            |
| Kidney          | Tubule                   | Regeneration, Nos         |
| Skeletal muscle | Leg                      | Inflammation, Acute Focal |
| Spleen          | Red Pulp                 | Hematopoiesis             |
| Testis          | Spermatogenic Epithelium | Atrophy, Focal            |
| Unspecified     | Back                     | Fibrosarcoma              |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_034

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                              |                                     |
|---------------|------------------------------|-------------------------------------|
| Adrenal gland | Capsule                      | Hyperplasia, Focal                  |
| Bone marrow   |                              | Hyperplasia, Granulocytic           |
| Brain         | Thalamus                     | Mineralization                      |
| Kidney        | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
| Liver         |                              | Hemangiosarcoma                     |
|               |                              | Hematopoiesis                       |
| Lung          |                              | Alveolar Macrophages                |
|               |                              | Alveolar/Bronchiolar Carcinoma      |
| Skin          | Abdomen                      | Inflammation, Acute/Chronic         |
| Spleen        | Red Pulp                     | Hematopoiesis                       |
| Stomach       | Forestomach                  | Acanthosis                          |
|               | Fundal Gland                 | Dilatation, Nos                     |
|               | Forestomach                  | Hyperkeratosis                      |
|               | Glandular Stomach            | Mineralization                      |
| Testis        | Spermatogenic Epithelium     | Mineralization                      |
| Unspecified   | Neck                         | Fibrosarcoma                        |

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_035

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                |                           |
|---------------|----------------|---------------------------|
| Adrenal gland | Cortex Nos     | Hyperplasia, Focal        |
| Bone marrow   |                | Hyperplasia, Granulocytic |
| Heart         | Myocardium Nos | Degeneration, Nos         |
| Liver         |                | Hematopoiesis             |
| Pancreas      |                | Atrophy, Focal            |
| Spleen        | Red Pulp       | Hematopoiesis             |
| Unspecified   | Chest          | Fibrosarcoma              |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_036

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                          |                                 |
|-----------------|--------------------------|---------------------------------|
| Adrenal gland   | Medulla                  | Hyperplasia, Focal              |
| Brain           | Thalamus                 | Mineralization                  |
| Intestine Small | Mesentery Nos            | Necrosis, Focal                 |
| Lung            |                          | Alveolar Macrophages            |
|                 |                          | Alveolar/Bronchiolar Carcinoma  |
| Pancreas        |                          | Inflammation, Acute Hemorrhagic |
| Spleen          | Red Pulp                 | Hematopoiesis                   |
| Testis          | Spermatogenic Epithelium | Atrophy, Focal                  |
| Thymus          |                          | Depletion, Lymphoid             |
| Unspecified     | Leg                      | Fibroma                         |
|                 | Back                     | Fibrosarcoma                    |

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_037

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                          |                              |
|---------------|--------------------------|------------------------------|
| Adrenal gland | Medulla                  | Pheochromocytoma             |
| Kidney        | Cortex                   | Inflammation, Acute/Chronic  |
| Spleen        | Red Pulp                 | Hematopoiesis                |
| Testis        | Spermatogenic Epithelium | Mineralization               |
| Thyroid       |                          | Hyperplasia, Follicular Cell |
| Unspecified   | Thigh                    | Fibrosarcoma                 |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_038

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|                   |                       |                                     |
|-------------------|-----------------------|-------------------------------------|
| Adrenal gland     | Periadrenal Tissue    | Inflammation, Acute/Chronic         |
| Bone marrow       |                       | Hyperplasia, Granulocytic           |
| Liver             |                       | Hematopoiesis                       |
| Lung              |                       | Alveolar/Bronchiolar Adenoma        |
| Lymph node        | Mesenteric Lymph Node | Hematopoiesis                       |
|                   | Mesenteric Lymph Node | Hemorrhage                          |
| Nerve, peripheral | Accessory Nerve Nos   | Lymphocytic Inflammatory Infiltrate |
| Prostate          |                       | Inflammation, Chronic Focal         |
| Spleen            | Red Pulp              | Hematopoiesis                       |
| Unspecified       |                       | Fibrosarcoma                        |

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_039

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Prostate  
Seminal vesicle  
Spleen  
Thymus

Colon  
Tubule  
  
Follicles  
Lymphocytes

Parasitism  
Mineralization  
Inflammation, Acute Focal  
Inflammation, Acute/Chronic  
Hyperplasia, Lymphoid  
Necrosis, Diffuse

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_040

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                |                                  |
|-----------------|----------------|----------------------------------|
| Heart           | Myocardium Nos | Degeneration, Nos                |
| Intestine Large | Colon          | Parasitism                       |
| Kidney          | Tubule         | Regeneration, Nos                |
| Lung            |                | Hyperplasia, Alveolar Epithelium |
| Pancreas        | Acinus         | Hypertrophy, Focal               |
| Thyroid         |                | Cyst, Follicular Nos             |
|                 |                | Hyperplasia, Follicular Cell     |
| Unspecified     | Chest          | Fibrosarcoma                     |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 1\_041

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Liver

Medulla

Hyperplasia, Focal  
Hepatocellular Carcinoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_042

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                          |                              |
|---------------|--------------------------|------------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal           |
| Brain         | Thalamus                 | Mineralization               |
| Kidney        | Tubule                   | Regeneration, Nos            |
| Liver         |                          | Hepatocellular Adenoma       |
| Lung          |                          | Congestion, Acute            |
| Spleen        | Follicles                | Hyperplasia, Lymphoid        |
| Testis        | Spermatogenic Epithelium | Atrophy, Focal               |
|               | Spermatogenic Epithelium | Mineralization               |
| Thyroid       |                          | Hyperplasia, Follicular Cell |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_043

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

|               |                          |                              |
|---------------|--------------------------|------------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal           |
|               | Cortex Nos               | Hyperplasia, Focal           |
| Liver         |                          | Hepatocellular Adenoma       |
| Lung          | Pleura Nos               | Inflammation, Acute/Chronic  |
| Lymph node    | Pancreatic Lymph Node    | Angiectasis                  |
|               | Pancreatic Lymph Node    | Hematopoiesis                |
|               | Pancreatic Lymph Node    | Hemorrhage                   |
|               | Mandibular Lymph Node    | Hyperplasia, Lymphoid        |
| Spleen        | Red Pulp                 | Hematopoiesis                |
| Testis        | Spermatogenic Epithelium | Atrophy, Focal               |
|               | Spermatogenic Epithelium | Mineralization               |
| Thyroid       |                          | Follicular-Cell Adenoma      |
|               |                          | Hyperplasia, Follicular Cell |
| Trachea       | Gland                    | Inflammation, Acute Focal    |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_044

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                              |                                     |
|-----------------|------------------------------|-------------------------------------|
| Adrenal gland   | Capsule                      | Hyperplasia, Focal                  |
|                 | Cortex Nos                   | Hyperplasia, Focal                  |
| Brain           | Thalamus                     | Mineralization                      |
| Intestine Small | Peyers Patch                 | Hyperplasia, Lymphoid               |
| Kidney          | Tubule                       | Atrophy, Focal                      |
|                 |                              | Cyst, Nos                           |
|                 | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|                 | Tubule                       | Mineralization                      |
|                 | Tubule                       | Regeneration, Nos                   |
| Lymph node      | Tracheal Lymph Node          | Hyperplasia, Lymphoid               |
| Spleen          | Follicles                    | Hyperplasia, Lymphoid               |
| Stomach         | Fundal Gland                 | Dilatation, Nos                     |
| Thyroid         |                              | Cyst, Follicular Nos                |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_045

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |           |                             |
|---------------|-----------|-----------------------------|
| Adrenal gland | Capsule   | Hyperplasia, Focal          |
| Brain         | Thalamus  | Mineralization              |
| Kidney        | Capsule   | Inflammation, Acute Focal   |
|               | Tubule    | Mineralization              |
|               | Tubule    | Necrosis, Focal             |
| Prostate      |           | Inflammation, Acute Diffuse |
| Spleen        | Follicles | Depletion, Lymphoid         |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 1\_046

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Liver  
Unspecified

Colon  
Multiple Organs Nos

Parasitism  
Hepatocellular Carcinoma  
Sarcoma, Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_047

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |            |                              |
|-----------------|------------|------------------------------|
| Adrenal gland   | Cortex Nos | Focal Cellular Change        |
|                 | Capsule    | Hyperplasia, Focal           |
| Blood vessel    | Aorta Nos  | Inflammation, Acute/Chronic  |
| Brain           | Thalamus   | Mineralization               |
| Kidney          | Tubule     | Regeneration, Nos            |
| Liver           |            | Hepatocellular Carcinoma     |
| Lung            |            | Alveolar/Bronchiolar Adenoma |
|                 |            | Congestion, Acute            |
| Preputial gland |            | Cyst, Multiple               |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 1\_048

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |                  |                                      |
|-------------|------------------|--------------------------------------|
| Liver       |                  | Hepatocellular Carcinoma             |
| Lung        |                  | Hepatocellular Carcinoma, Metastatic |
| Spleen      | Red Pulp         | Hematopoiesis                        |
| Stomach     | Cardiac Stomach  | Squamous Cell Papilloma              |
| Unspecified | Abdominal Cavity | Hemorrhage                           |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_049

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 010.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

|                 |                   |                                |
|-----------------|-------------------|--------------------------------|
| Adrenal gland   | Capsule           | Hyperplasia, Focal             |
|                 | Medulla           | Pheochromocytoma               |
| Brain           | Thalamus          | Mineralization                 |
| Lung            |                   | Alveolar Macrophages           |
|                 |                   | Alveolar/Bronchiolar Carcinoma |
| Preputial gland |                   | Dilatation, Ducts              |
| Spleen          | Red Pulp          | Hematopoiesis                  |
|                 | Follicles         | Hyperplasia, Lymphoid          |
| Stomach         | Glandular Stomach | Hyperplasia, Focal             |
| Unspecified     | Abdomen           | Hemangiosarcoma                |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 1\_050

**TRT#:** 1  
**DOSE:** 010.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Kidney  
Thymus

Tubule  
Lymphocytes

Dilatation, Nos  
Necrosis, Diffuse

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_001

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                       |                      |
|---------------|-----------------------|----------------------|
| Adrenal gland | Cortex Nos            | Degeneration, Lipoid |
|               | Capsule               | Hyperplasia, Focal   |
| Brain         | Thalamus              | Mineralization       |
| Kidney        | Tubule                | Degeneration, Nos    |
| Liver         | Hepatocytes           | Metamorphosis, Fatty |
| Lymph node    | Mesenteric Lymph Node | Angiectasis          |

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 2\_002

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Skeletal muscle

Necrosis, Focal

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 2\_003

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

Adrenal gland  
Kidney  
Liver  
Thymus

Capsule  
Tubule

Hyperplasia, Focal  
Regeneration, Nos  
Hepatocellular Adenoma  
Hyperplasia, Reticulum Cell

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_004

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Bone marrow  
Brain  
Unspecified

Capsule  
Thalamus  
Multiple Organs Nos

Hyperplasia, Focal  
Hyperplasia, Granulocytic  
Mineralization  
Lymphoma, Mixed-Malignant Type

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_005

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                     |                                |
|-----------------|---------------------|--------------------------------|
| Brain           | Thalamus            | Mineralization                 |
| Liver           |                     | Hepatocellular Carcinoma       |
|                 |                     | Inflammation, Acute/Chronic    |
| Lung            | Pleura Nos          | Fibrosis, Focal                |
| Preputial gland |                     | Dilatation, Ducts              |
| Thyroid         |                     | Hyperplasia, Follicular Cell   |
| Unspecified     | Multiple Organs Nos | Lymphoma, Mixed-Malignant Type |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_006

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|            |                          |                         |
|------------|--------------------------|-------------------------|
| Brain      | Thalamus                 | Mineralization          |
| Kidney     | Pelvis                   | Mineralization          |
|            | Tubule                   | Regeneration, Nos       |
| Lymph node | Mesenteric Lymph Node    | Congestion, Acute       |
| Testis     | Spermatogenic Epithelium | Atrophy, Focal          |
| Thyroid    |                          | Follicular-Cell Adenoma |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_007

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |                     |                                      |
|-------------|---------------------|--------------------------------------|
| Kidney      | Tubule              | Cytoplasmic Aggregate, Nos           |
| Spleen      | Red Pulp            | Hematopoiesis                        |
| Unspecified | Multiple Organs Nos | Lymphoma, Histiocytic-Malignant Type |

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_008

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                                     |   |
|---------------|-------------------------------------|---|
| Adrenal gland | Cortex Nos<br>Capsule<br>Cortex Nos | Focal Cellular Change<br>Hyperplasia, Focal<br>Hyperplasia, Focal |
| Bone marrow   |                                     | Hyperplasia, Granulocytic   |
| Brain         | Thalamus                            | Mineralization  |
| Kidney        | Tubule                              | Regeneration, Nos   |
| Liver         |                                     | Hematopoiesis   |
| Skin          | Epidermis                           | Acanthosis  |
| Spleen        | Red Pulp                            | Hematopoiesis   |
| Testis        | Spermatogenic Epithelium            | Mineralization  |
| Unspecified   | Abdomen<br>Back                     | Fibrosarcoma<br>Fibrosarcoma                                      |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_009

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                 |                              |
|-----------------|-----------------|------------------------------|
| Adrenal gland   | Cortex Nos      | Focal Cellular Change        |
|                 | Capsule         | Hyperplasia, Focal           |
|                 | Medulla         | Hyperplasia, Focal           |
| Brain           | Thalamus        | Mineralization               |
| Harderian gland | Hardarian Gland | Adenoma, Nos                 |
| Heart           |                 | Angiectasis                  |
| Intestine Small | Mesentery Nos   | Necrosis, Fat                |
| Kidney          | Tubule          | Regeneration, Nos            |
| Thyroid         |                 | Hyperplasia, Follicular Cell |
| Unspecified     | Back            | Fibrosarcoma                 |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_010

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                              |                                     |
|-----------------|------------------------------|-------------------------------------|
| Adrenal gland   | Medulla                      | Cytoplasmic Change, Basophilic      |
| Blood vessel    | Coronary Artery Nos          | Inflammation, Fibrinoid             |
| Brain           | Thalamus                     | Mineralization                      |
| Intestine Small | Mesentery Nos                | Hemorrhage                          |
|                 | Mesentery Nos                | Inflammation, Acute/Chronic         |
| Kidney          | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|                 | Tubule                       | Regeneration, Nos                   |
| Lymph node      | Mesenteric Lymph Node        | Inflammation, Acute/Chronic         |
| Skeletal muscle |                              | Inflammation, Necro Granulomatous   |
| Skin            | Back                         | Fibrosarcoma                        |
| Spleen          | Red Pulp                     | Hematopoiesis                       |
| Testis          | Spermatogenic Epithelium     | Atrophy, Focal                      |
|                 | Spermatogenic Epithelium     | Mineralization                      |
| Thymus          |                              | Depletion, Lymphoid                 |
| Thyroid         |                              | Cyst, Follicular Nos                |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_011

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                  |                              |
|---------------|------------------|------------------------------|
| Adrenal gland | Cortex Nos       | Focal Cellular Change        |
| Brain         | Thalamus         | Mineralization               |
| Heart         | Myocardium Nos   | Degeneration, Nos            |
|               | Right Atrium Nos | Thrombus, Fibrin             |
| Liver         |                  | Hematopoiesis                |
| Lung          |                  | Perivasculitis               |
| Skin          | Back             | Acanthosis                   |
|               | Back             | Hyperkeratosis               |
|               | Dermis           | Inflammation, Active Chronic |
|               | Back             | Ulcer, Nos                   |
| Spleen        | Red Pulp         | Hematopoiesis                |
| Thymus        |                  | Depletion, Lymphoid          |
| Thyroid       |                  | Cyst, Follicular Nos         |
| Unspecified   | Leg              | Sarcoma, Nos                 |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_012

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                     |                                      |
|---------------|---------------------|--------------------------------------|
| Adrenal gland | Capsule             | Hyperplasia, Focal                   |
| Heart         | Myocardium Nos      | Degeneration, Nos                    |
| Lung          |                     | Alveolar/Bronchiolar Adenoma         |
| Skin          | Back                | Acanthosis                           |
|               | Back                | Fibrosis, Multifocal                 |
|               | Back                | Hyperkeratosis                       |
| Unspecified   | Multiple Organs Nos | Lymphoma, Histiocytic-Malignant Type |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_013

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |            |                                  |
|---------------|------------|----------------------------------|
| Adrenal gland | Cortex Nos | Degeneration, Lipoid             |
|               | Capsule    | Hyperplasia, Focal               |
|               | Cortex Nos | Hyperplasia, Focal               |
|               | Medulla    | Pheochromocytoma                 |
| Kidney        | Tubule     | Regeneration, Nos                |
| Lung          |            | Alveolar/Bronchiolar Adenoma     |
|               |            | Hyperplasia, Alveolar Epithelium |
| Spleen        | Follicles  | Hyperplasia, Lymphoid            |
| Thymus        |            | Cyst, Ultimobranchial            |
| Unspecified   | Abdomen    | Inflammation, Granulomatous      |

PRIMARY CAUSE OF DEATH

-



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_014

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                |                           |
|---------------|----------------|---------------------------|
| Adrenal gland | Capsule        | Hyperplasia, Focal        |
| Heart         | Myocardium Nos | Necrosis, Focal           |
| Kidney        | Tubule         | Regeneration, Nos         |
| Lung          |                | Congestion, Acute         |
| Pancreas      | Acinus         | Hypertrophy, Focal        |
| Spleen        | Red Pulp       | Hematopoiesis             |
| Trachea       | Gland          | Inflammation, Acute Focal |
| Unspecified   | Leg            | Sarcoma, Nos              |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_015

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                          |                          |
|-----------------|--------------------------|--------------------------|
| Brain           | Thalamus                 | Mineralization           |
| Intestine Large | Colon                    | Parasitism               |
| Intestine Small | Peyers Patch             | Hyperplasia, Lymphoid    |
| Kidney          | Tubule                   | Regeneration, Nos        |
| Liver           |                          | Infarct, Acute           |
| Lymph node      | Mesenteric Lymph Node    | Hyperplasia, Lymphoid    |
| Pancreas        | Acinus                   | Atrophy, Focal           |
| Salivary gland  |                          | Atrophy, Focal           |
| Spleen          | Red Pulp                 | Hematopoiesis            |
| Testis          | Spermatogenic Epithelium | Atrophy, Focal           |
| Thymus          |                          | Depletion, Lymphoid      |
| Unspecified     | Back                     | Sarcoma, Nos             |
|                 | Multiple Organs Nos      | Sarcoma, Nos, Metastatic |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_016

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |           |                              |
|---------------|-----------|------------------------------|
| Adrenal gland | Capsule   | Hyperplasia, Focal           |
| Brain         | Thalamus  | Mineralization               |
| Kidney        | Capsule   | Fibrosis, Multifocal         |
|               | Cortex    | Fibrosis, Multifocal         |
|               | Tubule    | Regeneration, Nos            |
| Liver         |           | Hepatocellular Adenoma       |
|               |           | Hepatocellular Carcinoma     |
| Pancreas      |           | Atrophy, Focal               |
| Spleen        | Follicles | Hyperplasia, Lymphoid        |
| Thyroid       |           | Hyperplasia, Follicular Cell |
| Unspecified   |           | Cyst, Nos                    |
|               |           | Inflammation, Granulomatous  |

**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_017

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                       |                                |
|-----------------|-----------------------|--------------------------------|
| Adrenal gland   | Medulla               | Cytoplasmic Change, Basophilic |
|                 | Capsule               | Hyperplasia, Focal             |
| Brain           | Thalamus              | Mineralization                 |
| Intestine Small | Peyers Patch          | Hyperplasia, Lymphoid          |
| Kidney          | Tubule                | Regeneration, Nos              |
| Lymph node      | Mesenteric Lymph Node | Angiectasis                    |
|                 | Tracheal Lymph Node   | Hyperplasia, Lymphoid          |
| Skin            | Epidermis             | Acanthosis                     |
| Trachea         | Gland                 | Inflammation, Acute Focal      |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_018

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                   |                     |                                |
|-------------------|---------------------|--------------------------------|
| Adrenal gland     |                     | Cortical Adenoma               |
|                   | Capsule             | Hyperplasia, Focal             |
|                   | Cortex Nos          | Hyperplasia, Focal             |
| Brain             | Thalamus            | Mineralization                 |
| Kidney            | Tubule              | Regeneration, Nos              |
| Liver             |                     | Hemorrhage                     |
|                   |                     | Hepatocellular Carcinoma       |
| Lung              |                     | Congestion, Acute              |
| Parathyroid gland |                     | Inflammation, Acute/Chronic    |
| Skin              | Back                | Acanthosis                     |
|                   | Back                | Fibrosis, Multifocal           |
|                   | Back                | Hyperkeratosis                 |
|                   | Back                | Inflammation, Acute Focal      |
| Unspecified       | Back                | Fibroma                        |
|                   | Multiple Organs Nos | Lymphoma, Mixed-Malignant Type |

PRIMARY CAUSE OF DEATH

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_019

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|         |              |                                  |
|---------|--------------|----------------------------------|
| Brain   | Thalamus     | Mineralization                   |
| Lung    |              | Alveolar Macrophages             |
|         |              | Alveolar/Bronchiolar Carcinoma   |
|         |              | Hyperplasia, Alveolar Epithelium |
| Stomach | Fundal Gland | Mineralization                   |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_020

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Intestine Small  
Kidney

Capsule  
Peyers Patch  
Cortex  
Tubule  
Tubule

Hyperplasia, Focal  
Hyperplasia, Lymphoid  
Deposit, Nos  
Dilatation, Nos  
Regeneration, Nos  
Follicular-Cell Adenoma  
Hyperplasia, Follicular Cell

Thyroid

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_021

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                          |                                     |
|---------------|--------------------------|-------------------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal                  |
| Bone marrow   |                          | Hemangiosarcoma                     |
| Brain         | Thalamus                 | Mineralization                      |
| Esophagus     |                          | Mineralization                      |
| Kidney        | Tubule                   | Regeneration, Nos                   |
| Liver         |                          | Congestion, Acute                   |
|               | Hepatocytes              | Cytoplasmic Vacuolization           |
| Lung          |                          | Congestion, Acute                   |
| Lymph node    | Thymic Lymph Node        | Hyperplasia, Lymphoid               |
| Skin          | Chest                    | Squamous Cell Carcinoma             |
| Spleen        | Follicles                | Hyperplasia, Lymphoid               |
| Testis        | Spermatogenic Epithelium | Atrophy, Focal                      |
| Thymus        |                          | Hyperplasia, Reticulum Cell         |
| Unspecified   | Multiple Organs Nos      | Lymphocytic Inflammatory Infiltrate |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_022

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                       |                                      |
|-----------------|-----------------------|--------------------------------------|
| Adrenal gland   | Capsule               | Hyperplasia, Focal                   |
|                 | Cortex Nos            | Hyperplasia, Focal                   |
| Harderian gland | Harderian Gland       | Papillary Adenocarcinoma             |
| Kidney          | Tubule                | Regeneration, Nos                    |
| Lung            |                       | Congestion, Nos                      |
|                 |                       | Papillary Adenocarcinoma, Metastatic |
| Lymph node      | Mesenteric Lymph Node | Histiocytosis                        |
|                 | Tracheal Lymph Node   | Hyperplasia, Lymphoid                |
|                 | Mandibular Lymph Node | Papillary Adenocarcinoma, Metastatic |

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_023

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                              |                                     |
|---------------|------------------------------|-------------------------------------|
| Adrenal gland | Cortex Nos                   | Focal Cellular Change               |
|               | Cortex Nos                   | Hyperplasia, Focal                  |
| Brain         | Thalamus                     | Mineralization                      |
| Kidney        | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|               | Tubule                       | Regeneration, Nos                   |
| Lymph node    | Mesenteric Lymph Node        | Angiectasis                         |
| Skin          | Dermis                       | Inflammation, Acute/Chronic         |
| Spleen        | Follicles                    | Hyperplasia, Lymphoid               |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_024

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                              |  |
|-----------------|------------------------------|--|
| Adrenal gland   | Medulla                      | Hyperplasia, Focal                                     |
| Heart           | Myocardium Nos               | Degeneration, Nos                                      |
| Kidney          | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate<br>Nephropathy     |
|                 | Tubule                       | Regeneration, Nos                                      |
| Liver           |                              | Hepatocellular Adenoma<br>Hepatocellular Carcinoma     |
| Lung            |                              | Alveolar Macrophages<br>Alveolar/Bronchiolar Carcinoma |
|                 |                              | Congestion, Acute                                      |
| Lymph node      | Tracheal Lymph Node          | Hyperplasia, Lymphoid                                  |
| Preputial gland |                              | Dilatation, Ducts<br>Metaplasia, Squamous              |
| Spleen          | Follicles                    | Hyperplasia, Lymphoid                                  |
| Stomach         | Forestomach                  | Acanthosis   |
|                 | Forestomach                  | Hyperkeratosis   |
| Thyroid         |                              | Hyperplasia, Follicular Cell                           |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_025

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|         |             |
|---------|-------------|
| Kidney  | Tubule      |
| Lung    |             |
| Thymus  | Lymphocytes |
| Thyroid |             |

Mineralization  
Congestion, Acute  
Necrosis, Diffuse  
Cyst, Follicular Nos

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_026

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                              |                                     |
|---------------|------------------------------|-------------------------------------|
| Adrenal gland | Capsule                      | Adenoma, Nos                        |
|               | Capsule                      | Hyperplasia, Focal                  |
| Kidney        | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|               | Tubule                       | Regeneration, Nos                   |
| Lung          |                              | Congestion, Acute                   |
| Lymph node    | Mesenteric Lymph Node        | Angiectasis                         |
| Pancreas      | Acinus                       | Focal Cellular Change               |
| Stomach       | Forestomach                  | Squamous Cell Papilloma             |
| Testis        | Spermatogenic Epithelium     | Atrophy, Diffuse                    |
|               |                              | Granuloma, Spermatic                |
| Thymus        |                              | Cyst, Ultimobranchial               |
|               |                              | Hyperplasia, Reticulum Cell         |
| Thyroid       |                              | Hyperplasia, Follicular Cell        |
| Unspecified   | Multiple Organs Nos          | Mineralization                      |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_027

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                |                             |
|-----------------|----------------|-----------------------------|
| Adrenal gland   | Medulla        | Hyperplasia, Focal          |
| Brain           | Thalamus       | Mineralization              |
| Heart           | Myocardium Nos | Mineralization              |
| Intestine Large | Cecum, Colon   | Parasitism                  |
| Liver           |                | Infarct, Acute              |
|                 |                | Necrosis, Coagulative       |
| Lung            | Alveolar Wall  | Mineralization              |
| Skin            | Neck           | Acanthosis                  |
|                 | Neck           | Fibrosis, Multifocal        |
|                 | Neck           | Hyperkeratosis              |
|                 | Neck           | Inflammation, Acute/Chronic |
|                 | Neck           | Ulcer, Nos                  |
| Spleen          | Red Pulp       | Hematopoiesis               |
| Thymus          |                | Cyst, Ultimobranchial       |
| Unspecified     | Chest          | Fibrosarcoma                |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_028

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                          |                           |
|---------------|--------------------------|---------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal        |
| Heart         | Myocardium Nos           | Degeneration, Nos         |
| Kidney        | Tubule                   | Regeneration, Nos         |
| Lung          | Pleura Nos               | Fibrosis, Focal           |
| Stomach       | Fundal Gland             | Inflammation, Acute Focal |
| Testis        | Spermatogenic Epithelium | Mineralization            |
| Trachea       | Gland                    | Inflammation, Acute Focal |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_029

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                       |  |
|---------------|-----------------------|--|
| Adrenal gland | Cortex Nos<br>Capsule | Focal Cellular Change<br>Hyperplasia, Focal          |
| Gall bladder  |                       | Hyperplasia, Epithelial                              |
| Kidney        | Tubule<br>Tubule      | Mineralization<br>Regeneration, Nos                  |
| Spleen        | Follicles             | Hyperplasia, Lymphoid                                |
| Thyroid       |                       | Cyst, Follicular Nos<br>Hyperplasia, Follicular Cell |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_030

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:**

**DOSE:** 005.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland

Capsule

Cortical Adenoma

Medulla

Hyperplasia, Focal

Kidney

Tubule

Hyperplasia, Focal

Lung

Regeneration, Nos

Alveolar Macrophages

Alveolar/Bronchiolar Carcinoma

Skin

Back

Congestion, Acute

Back

Acanthosis

Back

Hyperkeratosis

Follicles

Inflammation, Granulomatous Focal

Spleen

Spermatogenic Epithelium

Hyperplasia, Lymphoid

Testis

Thymus

Mineralization

Unspecified

Back

Cyst, Ultimobranchial

Fibroma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_031

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|             |                              |                                      |
|-------------|------------------------------|--------------------------------------|
| Bone marrow |                              | Hyperplasia, Granulocytic            |
| Brain       | Thalamus                     | Mineralization                       |
| Heart       | Myocardium Nos               | Degeneration, Nos                    |
| Kidney      | Cortex                       | Degeneration, Nos                    |
|             | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate  |
|             | Tubule                       | Regeneration, Nos                    |
|             | Cortex                       | Sarcoma, Nos, Metastatic             |
| Liver       |                              | Hepatocellular Carcinoma             |
| Lung        |                              | Hepatocellular Carcinoma, Metastatic |
| Spleen      | Red Pulp                     | Hematopoiesis                        |
| Unspecified | Back                         | Sarcoma, Nos                         |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_032

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                              |                                     |
|---------------|------------------------------|-------------------------------------|
| Adrenal gland | Capsule                      | Adenoma, Nos                        |
| Brain         | Thalamus                     | Mineralization                      |
|               | Meninges                     | Perivascular Cuffing                |
| Kidney        | Cortex                       | Fibrosis, Focal                     |
|               | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|               | Tubule                       | Regeneration, Nos                   |
| Lung          |                              | Congestion, Acute                   |
|               |                              | Lymphocytic Inflammatory Infiltrate |
| Pancreas      | Acinus                       | Hypertrophy, Focal                  |
| Skin          | Epidermis                    | Acanthosis                          |
|               | Back                         | Fibrosis, Multifocal                |
| Stomach       | Fundal Gland                 | Cyst, Nos                           |
| Thymus        |                              | Hyperplasia, Lymphoid               |
| Unspecified   | Back                         | Fibroma                             |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_033

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Brain  
Kidney  
  
Lung

Capsule  
Thalamus  
Cortical Interstitial Tissue  
Tubule

Adenoma, Nos  
Mineralization  
Lymphocytic Inflammatory Infiltrate  
Regeneration, Nos  
Alveolar Macrophages  
Alveolar/Bronchiolar Carcinoma  
Lymphocytic Inflammatory Infiltrate

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_034

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Intestine Large  
Liver  
Lung  
Spleen

Medulla  
Colon  
  
Red Pulp

Hyperplasia, Focal  
Parasitism  
Hepatocellular Carcinoma  
Hepatocellular Carcinoma, Metastatic  
Hematopoiesis

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_035

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                     |                                |
|---------------|---------------------|--------------------------------|
| Adrenal gland | Capsule             | Hyperplasia, Focal             |
| Brain         | Thalamus            | Mineralization                 |
| Heart         | Myocardium Nos      | Degeneration, Nos              |
| Kidney        | Tubule              | Cytoplasmic Aggregate, Nos     |
| Liver         |                     | Hematopoiesis                  |
| Spleen        | Red Pulp            | Hematopoiesis                  |
| Thymus        |                     | Cyst, Ultimobranchial          |
|               |                     | Depletion, Lymphoid            |
| Unspecified   | Multiple Organs Nos | Lymphoma, Mixed-Malignant Type |

PRIMARY CAUSE OF DEATH

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_036

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Unspecified

Multiple Organs Nos

Leukemia, Undifferentiated

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_037

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                          |                             |
|---------------|--------------------------|-----------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal          |
| Kidney        | Tubule                   | Regeneration, Nos           |
| Liver         |                          | Hepatocellular Adenoma      |
| Lung          | Pleura Nos               | Inflammation, Acute/Chronic |
| Pancreas      | Acinus                   | Hypertrophy, Focal          |
| Spleen        | Follicles                | Hyperplasia, Lymphoid       |
| Testis        | Spermatogenic Epithelium | Atrophy, Focal              |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_038

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                     |   |
|-----------------|---------------------|---|
| Bone marrow     |                     | Hyperplasia, Granulocytic                 |
| Brain           | Thalamus            | Mineralization                            |
| Epididymis      |                     | Inflammation, Acute/Chronic               |
| Gall bladder    |                     | Necrosis, Focal                           |
| Heart           | Myocardium Nos      | Degeneration, Nos                         |
| Intestine Small | Jejunum             | Inflammation, Active Chronic              |
|                 | Mesentery Nos       | Inflammation, Granulomatous Focal         |
|                 | Jejunum             | Ulcer, Nos                                |
| Kidney          |                     | Inflammation, Acute Focal                 |
| Liver           |                     | Hematopoiesis                             |
|                 |                     | Necrosis, Focal                           |
| Lung            |                     | Alveolar Macrophages                      |
|                 |                     | Alveolar/Bronchiolar Adenoma              |
|                 |                     | Inflammation, Interstitial                |
| Pancreas        |                     | Inflammation, Chronic Diffuse             |
| Pituitary gland | Anterior Pituitary  | Cyst, Embryonal Duct                      |
| Prostate        |                     | Inflammation, Acute/Chronic               |
| Spleen          |                     | Necrosis, Focal                           |
| Thymus          |                     | Depletion, Lymphoid                       |
|                 |                     | Inflammation, Chronic Diffuse             |
| Unspecified     | Multiple Organs Nos | Lymphoma, Undifferentiated-Malignant Type |

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_039

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |                     |                                      |
|-------------|---------------------|--------------------------------------|
| Brain       | Thalamus            | Mineralization                       |
| Liver       |                     | Necrosis, Focal                      |
| Lung        |                     | Hyperplasia, Alveolar Epithelium     |
| Unspecified | Multiple Organs Nos | Lymphoma, Histiocytic-Malignant Type |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_040

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                          |  |
|-----------------|--------------------------|--|
| Adrenal gland   | Cortex Nos<br>Capsule    | Degeneration, Lipoid<br>Hyperplasia, Focal     |
| Brain           | Thalamus                 | Mineralization                                 |
| Liver           |                          | Necrosis, Coagulative                          |
| Lymph node      | Mandibular Lymph Node    | Pigmentation, Nos                              |
| Spleen          | Follicles                | Depletion, Lymphoid                            |
| Testis          | Spermatogenic Epithelium | Degeneration, Nos                              |
| Thymus          |                          | Cyst, Ultimobranchial                          |
| Urinary bladder |                          | Depletion, Lymphoid<br>Hyperplasia, Epithelial |
|                 | Submucosa                | Inflammation, Acute/Chronic                    |

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_041

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                       |                             |
|-----------------|-----------------------|-----------------------------|
| Kidney          |                       | Pyelonephritis, Chronic     |
| Lung            |                       | Congestion, Acute           |
|                 |                       | Edema, Nos                  |
|                 |                       | Inflammation, Interstitial  |
| Lymph node      | Mandibular Lymph Node | Depletion, Lymphoid         |
| Prostate        |                       | Inflammation, Acute/Chronic |
| Urinary bladder |                       | Inflammation, Acute/Chronic |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_042

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                     |                                |
|-----------------|---------------------|--------------------------------|
| Brain           | Thalamus            | Mineralization                 |
| Kidney          | Tubule              | Regeneration, Nos              |
| Lung            |                     | Alveolar Macrophages           |
|                 |                     | Alveolar/Bronchiolar Carcinoma |
| Preputial gland |                     | Dilatation, Ducts              |
| Thyroid         |                     | Cyst, Follicular Nos           |
| Unspecified     | Multiple Organs Nos | Lymphoma, Mixed-Malignant Type |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_043

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Pancreas

Acinus

Atrophy, Focal

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_044

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                          |                             |
|---------------|--------------------------|-----------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal          |
| Brain         | Thalamus                 | Mineralization              |
| Heart         | Myocardium Nos           | Degeneration, Nos           |
| Kidney        | Tubule                   | Regeneration, Nos           |
| Lung          |                          | Congestion, Acute           |
| Pancreas      | Acinus                   | Atrophy, Focal              |
| Skin          | Back                     | Acanthosis                  |
|               | Back                     | Hyperkeratosis              |
|               | Back                     | Inflammation, Chronic Focal |
| Spleen        | Follicles                | Hyperplasia, Lymphoid       |
| Testis        | Spermatogenic Epithelium | Atrophy, Nos                |
|               | Spermatogenic Epithelium | Mineralization              |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 2\_045

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |             |                            |
|-------------|-------------|----------------------------|
| Bone marrow |             | Aplasia, Erythroid         |
| Lung        |             | Inflammation, Interstitial |
| Prostate    |             | Steatitis                  |
| Spleen      |             | Depletion, Lymphoid        |
| Thymus      |             | Depletion, Lymphoid        |
|             | Lymphocytes | Necrosis, Diffuse          |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_046

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                          |                                |
|---------------|--------------------------|--------------------------------|
| Adrenal gland | Medulla                  | Cytoplasmic Change, Basophilic |
|               | Cortex Nos               | Hypertrophy, Focal             |
| Kidney        | Tubule                   | Regeneration, Nos              |
| Lung          |                          | Alveolar Macrophages           |
|               |                          | Alveolar/Bronchiolar Adenoma   |
| Skin          | Back                     | Acanthosis                     |
|               | Back                     | Fibrosis, Focal                |
|               | Back                     | Hyperkeratosis                 |
| Spleen        | Follicles                | Hyperplasia, Lymphoid          |
| Testis        | Spermatogenic Epithelium | Mineralization                 |
| Thymus        |                          | Cyst, Ultimobranchial          |
|               |                          | Hyperplasia, Reticulum Cell    |
| Thyroid       |                          | Cyst, Follicular Nos           |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_047

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                          |                             |
|-----------------|--------------------------|-----------------------------|
| Adrenal gland   | Capsule                  | Hyperplasia, Focal          |
| Brain           | Thalamus                 | Mineralization              |
| Heart           | Rt. Atrium               | Degeneration, Nos           |
| Kidney          | Tubule                   | Cyst, Nos                   |
|                 | Cortex                   | Fibrosis, Focal             |
|                 | Tubule                   | Regeneration, Nos           |
| Liver           |                          | Hepatocellular Carcinoma    |
| Lymph node      | Mesenteric Lymph Node    | Hemorrhage                  |
|                 | Mesenteric Lymph Node    | Hyperplasia, Lymphoid       |
|                 | Pancreatic Lymph Node    | Hyperplasia, Lymphoid       |
|                 | Mesenteric Lymph Node    | Inflammation, Acute Focal   |
| Pancreas        | Acinus                   | Atrophy, Diffuse            |
| Preputial gland |                          | Dilatation, Ducts           |
| Skin            | Back                     | Acanthosis                  |
|                 | Back                     | Fibrosis, Multifocal        |
|                 | Back                     | Hyperkeratosis              |
|                 | Back                     | Inflammation, Chronic Focal |
| Spleen          | Follicles                | Hyperplasia, Lymphoid       |
| Testis          | Spermatogenic Epithelium | Atrophy, Focal              |
|                 | Spermatogenic Epithelium | Mineralization              |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_048

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                       |                          |
|---------------|-----------------------|--------------------------|
| Adrenal gland | Capsule               | Hyperplasia, Focal       |
| Brain         | Thalamus              | Mineralization           |
| Kidney        | Tubule                | Regeneration, Nos        |
| Liver         |                       | Hepatocellular Carcinoma |
|               | Hepatocytes           | Necrosis, Focal          |
| Lung          |                       | Edema, Interstitial      |
| Lymph node    | Mandibular Lymph Node | Depletion, Lymphoid      |
|               | Mandibular Lymph Node | Histiocytosis            |
|               | Mandibular Lymph Node | Necrosis, Focal          |
| Spleen        | Follicles             | Depletion, Lymphoid      |
| Thymus        |                       | Depletion, Lymphoid      |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_049

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                       |                                |
|-----------------|-----------------------|--------------------------------|
| Adrenal gland   | Capsule               | Hyperplasia, Focal             |
| Kidney          | Tubule                | Regeneration, Nos              |
| Liver           |                       | Hepatocellular Adenoma         |
| Lung            |                       | Alveolar/Bronchiolar Carcinoma |
|                 |                       | Congestion, Acute              |
|                 | Alveoli               | Edema, Nos                     |
| Lymph node      | Mesenteric Lymph Node | Hyperplasia, Lymphoid          |
| Pituitary gland | Anterior Pituitary    | Cyst, Nos                      |
| Skin            | Back                  | Acanthosis                     |
|                 | Epidermis             | Acanthosis                     |
|                 | Back                  | Fibrosis, Multifocal           |
|                 | Back                  | Hyperkeratosis                 |
|                 | Epidermis             | Hyperkeratosis                 |
| Spleen          | Follicles             | Hyperplasia, Lymphoid          |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_050

**TRT#:** 2  
**DOSE:** 005.0 MG/KG

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |   |  |
|---------------|---|--|
| Adrenal gland | Cortex Nos<br>Capsule   | Degeneration, Lipoid<br>Hyperplasia, Focal             |
| Blood vessel  | Renal Artery Nos  | Inflammation, Granulomatous Focal                      |
| Kidney        | Tubule<br>Tubule<br>Tubule  | Dilatation, Nos<br>Mineralization<br>Regeneration, Nos |
| Liver         |   | Hepatocellular Adenoma                                 |
| Lymph node    | Mesenteric Lymph Node<br>Mesenteric Lymph Node<br>Mesenteric Lymph Node | Hemorrhage<br>Hyperplasia, Lymphoid<br>Thrombosis, Nos |
| Spleen        | Follicles   | Hyperplasia, Lymphoid                                  |
| Testis        |   | Neurilemoma  |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_001

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |            |                        |
|-----------------|------------|------------------------|
| Adrenal gland   | Cortex Nos | Focal Cellular Change  |
|                 | Capsule    | Hyperplasia, Focal     |
| Brain           | Thalamus   | Mineralization         |
| Intestine Large | Colon      | Parasitism             |
| Kidney          | Tubule     | Regeneration, Nos      |
| Liver           |            | Hepatocellular Adenoma |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_002

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |          |                             |
|-----------------|----------|-----------------------------|
| Adrenal gland   | Capsule  | Hyperplasia, Focal          |
|                 | Medulla  | Hyperplasia, Focal          |
| Brain           | Thalamus | Mineralization              |
| Intestine Large | Colon    | Parasitism                  |
| Kidney          | Tubule   | Regeneration, Nos           |
| Unspecified     | Abdomen  | Inflammation, Acute Diffuse |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_003

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Brain  
Kidney

Cortex Nos  
Thalamus  
Cortical Interstitial Tissue  
Tubule  
Anterior Pituitary

Focal Cellular Change  
Mineralization  
Inflammation, Acute Diffuse  
Mineralization  
Hyperplasia, Focal  
Inflammation, Acute/Chronic

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_004

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                          |                                |
|-----------------|--------------------------|--------------------------------|
| Adrenal gland   | Capsule                  | Hyperplasia, Focal             |
| Bone marrow     |                          | Hyperplasia, Granulocytic      |
| Brain           | Thalamus                 | Mineralization                 |
| Lung            |                          | Alveolar/Bronchiolar Carcinoma |
| Prostate        |                          | Inflammation, Acute Focal      |
| Skin            | Dermis                   | Inflammation, Acute/Chronic    |
| Spleen          | Red Pulp                 | Hematopoiesis                  |
| Testis          | Spermatogenic Epithelium | Atrophy, Diffuse               |
| Unspecified     | Back                     | Fibrosarcoma                   |
| Urinary bladder |                          | Hyperplasia, Epithelial        |
|                 | Serosa                   | Inflammation, Chronic Focal    |
|                 | Mucosa                   | Necrosis, Focal                |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_005

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

|                 |                |                           |
|-----------------|----------------|---------------------------|
| Heart           | Myocardium Nos | Inflammation, Acute Focal |
| Kidney          |                | Pyelonephritis, Acute     |
| Urinary bladder |                | Inflammation, Acute Focal |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_006

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                          |                              |
|---------------|--------------------------|------------------------------|
| Adrenal gland | Capsule                  | Hyperplasia, Focal           |
| Kidney        | Tubule                   | Regeneration, Nos            |
| Lung          |                          | Alveolar/Bronchiolar Adenoma |
| Spleen        | Follicles                | Hyperplasia, Lymphoid        |
| Testis        | Spermatogenic Epithelium | Degeneration, Nos            |
| Unspecified   | Multiple Organs Nos      | Sarcoma, Nos                 |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_007

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Epididymis  
Liver  
Thyroid

Granuloma, Spermatic  
Hepatocellular Adenoma  
Cyst, Follicular Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 16:49:00

**First Dose M/F:** NA / NA

**Lab:** NA

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**ANIMAL ID:** 3\_008

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Brain  
Pancreas

Thalamus  
Acinus

Mineralization  
Necrosis, Focal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_009

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

Unspecified

Multiple Organs Nos

Lymphoma, Lymphocytic-Malignant Type

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_010

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                          |                                |
|---------------|--------------------------|--------------------------------|
| Adrenal gland | Cortex Nos               | Degeneration, Nos              |
|               | Capsule                  | Hyperplasia, Focal             |
| Bone          | Carpometacarpal Joint    | Giant-Cell Tumor/Tendon Sheath |
| Heart         | Myocardium Nos           | Degeneration, Nos              |
| Liver         |                          | Hepatocellular Carcinoma       |
|               | Hepatocytes              | Necrosis, Coagulative          |
| Lung          |                          | Congestion, Acute              |
| Stomach       | Mucosa                   | Erosion                        |
|               | Mucosa                   | Necrosis, Focal                |
| Testis        | Spermatogenic Epithelium | Degeneration, Nos              |
| Thymus        |                          | Cyst, Ultimobranchial          |
|               | Lymphocytes              | Necrosis, Diffuse              |

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_011

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |             |                           |
|-----------------|-------------|---------------------------|
| Adrenal gland   | Capsule     | Hyperplasia, Focal        |
| Bone marrow     |             | Hyperplasia, Granulocytic |
| Heart           |             | Fibrosarcoma, Metastatic  |
| Intestine Large | Rectum      | Parasitism                |
| Liver           | Hepatocytes | Necrosis, Coagulative     |
| Lung            |             | Fibrosarcoma, Metastatic  |
| Spleen          | Red Pulp    | Hematopoiesis             |
| Unspecified     | Back        | Fibrosarcoma              |

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_012

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|             |               |   |
|-------------|---------------|---|
| Bone marrow |               | Hyperplasia, Granulocytic                     |
| Kidney      |               | Fibrosarcoma, Metastatic                      |
| Liver       |               | Angiectasis                                   |
|             | Centrilobular | Inflammation, Acute/Chronic                   |
| Lung        |               | Fibrosarcoma, Metastatic                      |
| Spleen      | Red Pulp      | Hematopoiesis                                 |
| Thyroid     |               | Cyst, Follicular Nos                          |
| Unspecified | Leg           | Fibrosarcoma                                  |
|             | Shoulder      | Fibrosarcoma, Uncertain Primary Or Metastatic |

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_013

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                       |                        |
|---------------|-----------------------|------------------------|
| Adrenal gland | Medulla               | Hyperplasia, Focal     |
| Brain         | Thalamus              | Mineralization         |
| Epididymis    |                       | Granuloma, Spermatic   |
| Heart         | Myocardium Nos        | Hemangiosarcoma        |
| Liver         |                       | Hepatocellular Adenoma |
| Lymph node    | Mesenteric Lymph Node | Angiectasis            |

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_014

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|             |                |                              |
|-------------|----------------|------------------------------|
| Bone marrow |                | Atrophy, Focal               |
| Heart       | Myocardium Nos | Necrosis, Focal              |
| Lung        |                | Alveolar/Bronchiolar Adenoma |
|             |                | Fibrosarcoma, Metastatic     |
| Spleen      | Red Pulp       | Hematopoiesis                |
| Testis      |                | Mineralization               |
| Unspecified | Back           | Fibrosarcoma                 |
|             | Flank          | Fibrosarcoma, Invasive       |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_015

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Prostate  
Testis  
Thymus

Spermatogenic Epithelium  
Lymphocytes

Inflammation, Acute Diffuse  
Degeneration, Nos  
Necrosis, Diffuse

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_016

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                       |                       |
|---------------|-----------------------|-----------------------|
| Adrenal gland | Cortex Nos            | Hypertrophy, Focal    |
| Brain         | Thalamus              | Mineralization        |
| Kidney        | Tubule                | Regeneration, Nos     |
| Lymph node    | Mesenteric Lymph Node | Angiectasis           |
| Spleen        | Follicles             | Hyperplasia, Lymphoid |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_017

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                       |                           |
|---------------|-----------------------|---------------------------|
| Adrenal gland | Capsule               | Hyperplasia, Focal        |
|               | Medulla               | Inflammation, Acute Focal |
| Brain         | Thalamus              | Mineralization            |
| Kidney        | Pelvis                | Dilatation, Nos           |
|               | Pelvis                | Inflammation, Acute Focal |
|               | Tubule                | Mineralization            |
| Lung          |                       | Congestion, Acute         |
|               | Alveoli               | Hemorrhage                |
| Lymph node    | Pancreatic Lymph Node | Angiectasis               |
| Prostate      |                       | Inflammation, Acute Focal |
| Spleen        | Follicles             | Necrosis, Focal           |

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_018

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Capsule  
Medulla

Hyperplasia, Focal  
Pheochromocytoma

Kidney

Nephropathy

Liver

Hepatocellular Carcinoma

Spleen

Follicles

Hyperplasia, Lymphoid

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_019

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Intestine Large  
Lung  
Skin  
Spleen  
Unspecified

Capsule  
Colon  
Neck  
Red Pulp  
Back

Adenoma, Nos  
Parasitism  
Alveolar/Bronchiolar Adenoma  
Hyperplasia, Focal  
Hematopoiesis  
Sarcoma, Nos

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_020

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                          |                          |
|-----------------|--------------------------|--------------------------|
| Kidney          | Cortex                   | Mineralization           |
| Liver           |                          | Hepatocellular Carcinoma |
| Seminal vesicle |                          | Dilatation, Nos          |
| Spleen          |                          | Depletion, Lymphoid      |
| Testis          | Spermatogenic Epithelium | Degeneration, Nos        |
| Thymus          | Lymphocytes              | Necrosis, Diffuse        |

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_021

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                       |                                      |
|-----------------|-----------------------|--------------------------------------|
| Adrenal gland   | Cortex Nos            | Focal Cellular Change                |
|                 | Capsule               | Hyperplasia, Focal                   |
| Brain           | Thalamus              | Mineralization                       |
| Harderian gland | Harderian Gland       | Papillary Adenocarcinoma             |
| Heart           | Myocardium Nos        | Inflammation, Acute/Chronic          |
| Liver           | Hepatocytes           | Necrosis, Focal                      |
| Lymph node      | Mesenteric Lymph Node | Angiectasis                          |
| Skin            | Face                  | Ulcer, Chronic                       |
| Unspecified     | Multiple Organs Nos   | Lymphoma, Lymphocytic-Malignant Type |

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_022

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                |                      |                                   |
|----------------|----------------------|-----------------------------------|
| Blood vessel   | Pulmonary Artery Nos | Inflammation, Acute/Chronic       |
| Epididymis     |                      | Inflammation, Granulomatous Focal |
| Salivary gland |                      | Necrosis, Focal                   |
| Spleen         | Red Pulp             | Hematopoiesis                     |

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_023

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |                   |                                      |
|---------------|-------------------|--------------------------------------|
| Adrenal gland | Capsule           | Hyperplasia, Focal                   |
| Brain         | Thalamus          | Mineralization                       |
| Kidney        | Tubule            | Regeneration, Nos                    |
| Liver         |                   | Cell-Size Alteration                 |
|               |                   | Hepatocellular Carcinoma             |
| Lung          |                   | Hepatocellular Carcinoma, Metastatic |
| Skin          | Back              | Fibrosis, Focal                      |
| Stomach       | Glandular Stomach | Dilatation, Nos                      |

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_024

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |               |                           |
|---------------|---------------|---------------------------|
| Adrenal gland | Capsule       | Hyperplasia, Focal        |
| Kidney        |               | Pyelonephritis, Acute     |
| Liver         | Periportal    | Degeneration, Nos         |
|               | Hepatocytes   | Metamorphosis, Fatty      |
|               | Centrilobular | Regeneration, Nos         |
| Prostate      |               | Inflammation, Acute Focal |
| Spleen        | Follicles     | Depletion, Lymphoid       |

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_025

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                       |                           |
|-----------------|-----------------------|---------------------------|
| Adrenal gland   | Capsule               | Hyperplasia, Focal        |
| Bone marrow     |                       | Hyperplasia, Granulocytic |
| Harderian gland | Hardarian Gland       | Adenoma, Nos              |
| Liver           |                       | Hematopoiesis             |
| Lymph node      | Mandibular Lymph Node | Hematopoiesis             |
| Spleen          | Red Pulp              | Hematopoiesis             |
| Unspecified     | Flank                 | Fibrosarcoma              |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_026

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |                |                              |
|-----------------|----------------|------------------------------|
| Bone marrow     |                | Hyperplasia, Granulocytic    |
| Brain           | Thalamus       | Mineralization               |
| Heart           | Myocardium Nos | Degeneration, Nos            |
| Intestine Large | Colon          | Parasitism                   |
| Skin            | Epidermis      | Ulceration, Diffuse          |
| Spleen          | Red Pulp       | Hematopoiesis                |
| Thyroid         |                | Cyst, Follicular Nos         |
| Unspecified     |                | Inflammation, Active Chronic |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_027

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |               |                         |
|-----------------|---------------|-------------------------|
| Adrenal gland   | Cortex Nos    | Degeneration, Nos       |
| Brain           | Thalamus      | Mineralization          |
| Intestine Small | Mesentery Nos | Necrosis, Fat           |
| Skin            |               | Squamous Cell Papilloma |
| Spleen          | Follicles     | Hyperplasia, Lymphoid   |
| Thyroid         |               | Cyst, Follicular Nos    |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 3\_028

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Heart  
Kidney  
Liver  
Lymph node  
Thyroid

Capsule  
Myocardium Nos  
Tubule  
Hepatocytes  
Mesenteric Lymph Node

Hyperplasia, Focal  
Nuclear-Size Alteration  
Regeneration, Nos  
Metamorphosis, Fatty  
Angiectasis  
Hyperplasia, Follicular Cell

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_029

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|         |                          |                              |
|---------|--------------------------|------------------------------|
| Brain   | Thalamus                 | Mineralization               |
| Kidney  | Tubule                   | Regeneration, Nos            |
| Liver   | Hepatocytes              | Degeneration, Cystic         |
| Lung    |                          | Alveolar/Bronchiolar Adenoma |
| Testis  | Spermatogenic Epithelium | Degeneration, Nos            |
| Thyroid |                          | Hyperplasia, Follicular Cell |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_030

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Kidney

Pelvis

Tubule

Tubule

Inflammation, Acute Focal

Necrosis, Focal

Necrosis, Focal

Regeneration, Nos

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_031

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

|             |          |                           |
|-------------|----------|---------------------------|
| Bone marrow |          | Hyperplasia, Granulocytic |
| Brain       | Thalamus | Mineralization            |
| Liver       |          | Hepatocellular Adenoma    |
| Spleen      | Red Pulp | Hematopoiesis             |
| Unspecified | Abdomen  | Sarcoma, Nos              |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_032

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                              |                                     |
|---------------|------------------------------|-------------------------------------|
| Adrenal gland | Capsule                      | Hyperplasia, Focal                  |
|               | Cortex Nos                   | Hyperplasia, Focal                  |
|               | Medulla                      | Pheochromocytoma                    |
| Brain         | Thalamus                     | Mineralization                      |
| Kidney        | Tubule                       | Degeneration, Nos                   |
|               | Cortical Interstitial Tissue | Lymphocytic Inflammatory Infiltrate |
|               | Tubule                       | Regeneration, Nos                   |
| Liver         |                              | Hepatocellular Adenoma              |
| Lung          |                              | Lymphocytic Inflammatory Infiltrate |
| Lymph node    | Mesenteric Lymph Node        | Angiectasis                         |
| Thyroid       |                              | Hyperplasia, Follicular Cell        |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_033

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland

Cortex Nos  
Medulla

Focal Cellular Change  
Hyperplasia, Focal

Liver

Hepatocellular Adenoma  
Hepatocellular Carcinoma

Lymph node

Mandibular Lymph Node

Hyperplasia, Lymphoid

Testis

Spermatogenic Epithelium

Degeneration, Nos

Unspecified

Back

Fibrosarcoma

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_034

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|         |             |                              |
|---------|-------------|------------------------------|
| Brain   | Thalamus    | Mineralization               |
| Kidney  | Tubule      | Regeneration, Nos            |
| Liver   |             | Hepatocellular Adenoma       |
| Penis   | Prepuce Nos | Inflammation, Acute/Chronic  |
| Spleen  | Follicles   | Hyperplasia, Lymphoid        |
| Thyroid |             | Hyperplasia, Follicular Cell |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_035

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Kidney  
Lung  
Thymus  
Thyroid

Capsule  
Tubule

Adenoma, Nos  
Regeneration, Nos  
Alveolar/Bronchiolar Carcinoma  
Cyst, Ultimobranhial  
Follicular-Cell Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_036

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Intestine Large  
Kidney

Colon  
Tubule  
Pelvis

Lung  
Prostate  
Spleen  
Stomach  
Thymus

Follicles  
Fundus  
Lymphocytes

Parasitism  
Dilatation, Nos  
Inflammation, Acute Focal  
Inflammation, Interstitial  
Inflammation, Acute Focal  
Necrosis, Focal  
Metaplasia, Squamous  
Necrosis, Diffuse

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_037

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|            |                          |                            |
|------------|--------------------------|----------------------------|
| Kidney     | Tubule                   | Regeneration, Nos          |
| Liver      |                          | Hemangiosarcoma            |
| Lymph node | Mesenteric Lymph Node    | Angiectasis                |
| Skin       | Chest                    | Ulcer, Chronic             |
| Testis     | Spermatogenic Epithelium | Mineralization             |
| Thyroid    |                          | Papillary Cystadenoma, Nos |

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_038

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |        |                             |
|-----------------|--------|-----------------------------|
| Kidney          | Tubule | Mineralization              |
|                 |        | Nephrosis, Hydro            |
|                 | Tubule | Regeneration, Nos           |
| Prostate        |        | Inflammation, Acute/Chronic |
| Seminal vesicle |        | Inflammation, Acute Diffuse |
| Spleen          |        | Depletion, Lymphoid         |
| Urinary bladder |        | Inflammation, Acute/Chronic |

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_039

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |          |                    |
|-----------------|----------|--------------------|
| Adrenal gland   | Capsule  | Hyperplasia, Focal |
|                 | Medulla  | Pheochromocytoma   |
| Brain           | Thalamus | Mineralization     |
| Intestine Large | Colon    | Parasitism         |
| Spleen          | Red Pulp | Hematopoiesis      |
| Unspecified     | Flank    | Sarcoma, Nos       |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_040

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Intestine Large  
Kidney  
Liver

Cecum, Colon  
Tubule

Hepatocytes

Lung  
Lymph node  
Spleen

Renal Lymph Node  
Red Pulp

Parasitism  
Dilatation, Nos  
Hemangiosarcoma  
Necrosis, Focal  
Congestion, Acute  
Hemangiosarcoma  
Hematopoiesis

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_041

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |                          |                          |
|-------------|--------------------------|--------------------------|
| Brain       | Thalamus                 | Mineralization           |
| Epididymis  |                          | Granuloma, Spermatic     |
| Liver       |                          | Hepatocellular Carcinoma |
| Lung        |                          | Congestion, Acute        |
| Spleen      | Follicles                | Depletion, Lymphoid      |
| Testis      | Spermatogenic Epithelium | Hypospermatogenesis      |
| Unspecified | Back                     | Fibroma                  |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_042

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |  |  |
|-----------------|--|--|
| Adrenal gland   | Cortex Nos                             | Degeneration, Lipoid                                     |
| Kidney          | Cortical Interstitial Tissue<br>Tubule | Lymphocytic Inflammatory Infiltrate<br>Regeneration, Nos |
| Liver           |  | Hepatocellular Adenoma                                   |
| Lung            |  | Alveolar/Bronchiolar Adenoma                             |
| Lymph node      | Mesenteric Lymph Node                  | Angiectasis  |
| Preputial gland |  | Cyst, Multiple<br>Inflammation, Acute/Chronic            |
| Spleen          | Follicles                              | Hyperplasia, Lymphoid                                    |
| Testis          | Spermatogenic Epithelium               | Mineralization   |
| Thyroid         |  | Hyperplasia, Follicular Cell                             |
| Unspecified     | Back<br>Abdomen                        | Fibroma<br>Inflammation, Granulomatous Focal             |
| Zymbal gland    |  | Squamous Cell Carcinoma                                  |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_043

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|               |                   |                                      |
|---------------|-------------------|--------------------------------------|
| Adrenal gland | Capsule           | Hyperplasia, Focal                   |
| Brain         | Thalamus          | Mineralization                       |
| Kidney        | Tubule            | Regeneration, Nos                    |
| Liver         |                   | Hepatocellular Carcinoma             |
| Lung          |                   | Hepatocellular Carcinoma, Metastatic |
| Spleen        | Red Pulp          | Hematopoiesis                        |
| Stomach       | Glandular Stomach | Dilatation, Nos                      |
|               | Glandular Stomach | Metaplasia, Squamous                 |
| Unspecified   | Back              | Fibrosarcoma                         |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_044

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|             |                       |                         |
|-------------|-----------------------|-------------------------|
| Brain       | Thalamus              | Mineralization          |
| Kidney      | Tubule                | Regeneration, Nos       |
| Liver       |                       | Hemangiosarcoma         |
|             |                       | Hepatocellular Adenoma  |
| Lymph node  | Mesenteric Lymph Node | Angiectasis             |
| Skin        | Back                  | Squamous Cell Papilloma |
| Spleen      | Red Pulp              | Hematopoiesis           |
| Thyroid     |                       | Cyst, Follicular Nos    |
| Unspecified | Back                  | Fibrosarcoma            |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_045

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

|                 |                          |                                   |
|-----------------|--------------------------|-----------------------------------|
| Adrenal gland   | Cortex Nos               | Focal Cellular Change             |
| Kidney          | Tubule                   | Regeneration, Nos                 |
| Liver           |                          | Hepatocellular Carcinoma          |
| Lymph node      | Mesenteric Lymph Node    | Hyperplasia, Diffuse              |
| Preputial gland |                          | Inflammation, Granulomatous Focal |
| Skin            | Epidermis                | Acanthosis                        |
| Spleen          | Follicles                | Hyperplasia, Lymphoid             |
| Testis          | Spermatogenic Epithelium | Mineralization                    |
| Unspecified     | Back                     | Fibrosis, Multifocal              |

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_046

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Brain  
Intestine Large

Thalamus  
Colon

Mineralization  
Parasitism

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_047

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|                 |           |                             |
|-----------------|-----------|-----------------------------|
| Adrenal gland   | Capsule   | Hyperplasia, Focal          |
| Brain           | Thalamus  | Mineralization              |
| Gall bladder    |           | Hyperplasia, Epithelial     |
| Kidney          | Tubule    | Regeneration, Nos           |
| Preputial gland |           | Cyst, Multiple              |
|                 |           | Inflammation, Acute/Chronic |
| Spleen          | Follicles | Hyperplasia, Lymphoid       |
| Thymus          |           | Depletion, Lymphoid         |

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**PRIMARY CAUSE OF DEATH**

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**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_048

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

Adrenal gland  
Liver  
Lung  
Stomach

Medulla  
  
Forestomach

Pheochromocytoma  
Hepatocellular Carcinoma  
Congestion, Acute  
Hyperkeratosis

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_049

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|               |             |                                  |
|---------------|-------------|----------------------------------|
| Adrenal gland | Capsule     | Hyperplasia, Focal               |
|               | Cortex Nos  | Hyperplasia, Focal               |
| Brain         | Thalamus    | Mineralization                   |
| Kidney        | Tubule      | Regeneration, Nos                |
| Liver         | Hepatocytes | Inflammation, Acute Focal        |
| Lung          |             | Hyperplasia, Alveolar Epithelium |
| Thyroid       |             | Hyperplasia, Follicular Cell     |

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C55050  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Mouse/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Tetrakis(hydroxymethyl)phosphonium sulfate  
**CAS Number:** 55566-30-8

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 16:49:00  
**First Dose M/F:** NA / NA  
**Lab:** NA

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**ANIMAL ID:** 3\_050

**TRT#:** 3  
**DOSE:** 0

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

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**OBSERVATIONS**

|         |            |                                      |
|---------|------------|--------------------------------------|
| Kidney  | Tubule     | Regeneration, Nos                    |
| Liver   |            | Hepatocellular Carcinoma             |
|         | Periportal | Necrosis, Focal                      |
| Lung    |            | Hepatocellular Carcinoma, Metastatic |
| Spleen  | Red Pulp   | Hematopoiesis                        |
| Thyroid |            | Hyperplasia, Follicular Cell         |

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**PRIMARY CAUSE OF DEATH**

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