

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

**C Number:**

C16019-02

**Study Gender:**

Both

**PWG Approval Date**

See web page for date of PWG Approval

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

	Male					
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<b>Disposition Summary</b>						
<b>Animals Initially In Study</b>	5	5	5	5	5	5
<b>Early Deaths</b>						
<b>Euthanized, moribund</b>						2
<b>Found Dead</b>						3
<b>Survivors</b>						
<b>Scheduled sacrifice, terminal (SD 14)</b>	5	5	5	5	5	
<b>Number of Animals Examined</b>	5	5	5	5	5	5
<b>ALIMENTARY SYSTEM</b>						
ESOPHAGUS	(5)	(5)	(5)	(5)	(5)	(5)
GALLBLADDER	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, CECUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, COLON	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, RECTUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, DUODENUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, ILEUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, JEJUNUM	(5)	(5)	(5)	(5)	(5)	(5)
LIVER	(5)	(5)	(5)	(5)	(5)	(5)
PANCREAS	(5)	(5)	(5)	(5)	(5)	(5)
PHARYNX	(5)	(5)	(5)	(5)	(5)	(5)
SALIVARY GLANDS	(5)	(5)	(5)	(5)	(5)	(5)
STOMACH, FORESTOMACH	(5)	(5)	(5)	(5)	(5)	(5)
STOMACH, GLANDULAR	(5)	(5)	(5)	(5)	(5)	(5)
TONGUE	(5)	(5)	(5)	(5)	(5)	(5)
<b>CARDIOVASCULAR SYSTEM</b>						
AORTA	(5)	(5)	(5)	(5)	(5)	(5)
HEART	(5)	(5)	(5)	(5)	(5)	(5)

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

	Male					
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<b>ENDOCRINE SYSTEM</b>						
ADRENAL GLAND	(5)	(5)	(5)	(5)	(5)	(5)
PARATHYROID GLAND	(5)	(5)	(5)	(5)	(5)	(5)
PITUITARY GLAND	(5)	(5)	(5)	(5)	(5)	(5)
THYROID GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
PREPUTIAL GLAND	(5)	(5)	(5)	(5)	(5)	(5)
PROSTATE	(5)	(5)	(5)	(5)	(5)	(5)
SEMINAL VESICLE	(5)	(5)	(5)	(5)	(5)	(5)
TESTES	(5)	(5)	(5)	(5)	(5)	(5)
<b>HEMATOLYMPHOID SYSTEM</b>						
LYMPH NODE, BRONCHIAL	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MANDIBULAR	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MEDIASTINAL	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MESENTERIC	(5)	(5)	(5)	(5)	(5)	(5)
SPLEEN	(5)	(5)	(5)	(5)	(5)	(5)
THYMUS	(5)	(5)	(5)	(5)	(5)	(5)
<b>INTEGUMENTARY SYSTEM</b>						
MAMMARY GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<b>MUSCULOSKELETAL SYSTEM</b>						
BONE, FEMUR	(5)	(5)	(5)	(5)	(5)	(5)
MUSCLE, THIGH	(5)	(5)	(5)	(5)	(5)	(5)

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

---

	Male					
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<hr/>						
NERVOUS SYSTEM						
BRAIN	(5)	(5)	(5)	(5)	(5)	(5)
NERVE, SCIATIC	(5)	(5)	(5)	(5)	(5)	(5)
NERVE, TRIGEMINAL	(5)	(5)	(5)	(5)	(5)	(5)
SPINAL CORD	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
RESPIRATORY SYSTEM						
LARYNX	(5)	(5)	(5)	(5)	(5)	(5)
LUNG	(5)	(5)	(5)	(5)	(5)	(5)
NOSE	(5)	(5)	(5)	(5)	(5)	(5)
TRACHEA	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
SPECIAL SENSES SYSTEM						
EYE	(5)	(5)	(5)	(5)	(5)	(5)
HARDERIAN GLAND	(5)	(5)	(5)	(5)	(5)	(5)
ZYMBALS GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
URINARY SYSTEM						
KIDNEY	(5)	(5)	(5)	(5)	(5)	(5)
URINARY BLADDER	(5)	(5)	(5)	(5)	(5)	(5)

---

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

	Female					
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<b>Disposition Summary</b>						
<b>Animals Initially In Study</b>	5	5	5	5	5	5
<b>Early Deaths</b>						
<b>Euthanized, moribund</b>						2
<b>Found Dead</b>						3
<b>Survivors</b>						
<b>Scheduled sacrifice, terminal (SD 14)</b>	5	5	5	5	5	
<b>Number of Animals Examined</b>	5	5	5	5	5	5
<b>ALIMENTARY SYSTEM</b>						
ESOPHAGUS	(5)	(5)	(5)	(5)	(5)	(5)
GALLBLADDER	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, CECUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, COLON	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, LARGE, RECTUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, DUODENUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, ILEUM	(5)	(5)	(5)	(5)	(5)	(5)
INTESTINE, SMALL, JEJUNUM	(5)	(5)	(5)	(5)	(5)	(5)
LIVER	(5)	(5)	(5)	(5)	(5)	(5)
PANCREAS	(5)	(5)	(5)	(5)	(5)	(5)
PHARYNX	(5)	(5)	(5)	(5)	(5)	(5)
SALIVARY GLANDS	(5)	(5)	(5)	(5)	(5)	(5)
STOMACH, FORESTOMACH	(5)	(5)	(5)	(5)	(5)	(5)
STOMACH, GLANDULAR	(5)	(5)	(5)	(5)	(5)	(5)
TONGUE	(5)	(5)	(5)	(5)	(5)	(5)
<b>CARDIOVASCULAR SYSTEM</b>						
AORTA	(5)	(5)	(5)	(5)	(5)	(5)
HEART	(5)	(5)	(5)	(5)	(5)	(5)

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

Female						
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<b>ENDOCRINE SYSTEM</b>						
ADRENAL GLAND	(5)	(5)	(5)	(5)	(5)	(5)
PARATHYROID GLAND	(5)	(5)	(5)	(5)	(5)	(5)
PITUITARY GLAND	(5)	(5)	(5)	(5)	(5)	(5)
THYROID GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
CLITORAL GLAND	(5)	(5)	(5)	(5)	(5)	(5)
OVARY	(5)	(5)	(5)	(5)	(5)	(5)
LEFT; SMALL; PALE		1				
RIGHT; SMALL; PALE		1				
VAGINA,UTERUS,CERVIX TOGETHER	(5)	(5)	(5)	(5)	(5)	(5)
<b>HEMATOLYMPHOID SYSTEM</b>						
LYMPH NODE, BRONCHIAL	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MANDIBULAR	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MEDIASTINAL	(5)	(5)	(5)	(5)	(5)	(5)
LYMPH NODE, MESENTERIC	(5)	(5)	(5)	(5)	(5)	(5)
SPLEEN	(5)	(5)	(5)	(5)	(5)	(5)
THYMUS	(5)	(5)	(5)	(5)	(5)	(5)
<b>INTEGUMENTARY SYSTEM</b>						
MAMMARY GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<b>MUSCULOSKELETAL SYSTEM</b>						
BONE, FEMUR	(5)	(5)	(5)	(5)	(5)	(5)
MUSCLE, THIGH	(5)	(5)	(5)	(5)	(5)	(5)

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

---

	Female					
	Treatment Groups (mg/L)					
	0	6.25	12.5	25	50	100
<hr/>						
NERVOUS SYSTEM						
BRAIN	(5)	(5)	(5)	(5)	(5)	(5)
NERVE, SCIATIC	(5)	(5)	(5)	(5)	(5)	(5)
NERVE, TRIGEMINAL	(5)	(5)	(5)	(5)	(5)	(5)
SPINAL CORD	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
RESPIRATORY SYSTEM						
LARYNX	(5)	(5)	(5)	(5)	(5)	(5)
LUNG	(5)	(5)	(5)	(5)	(5)	(5)
NOSE	(5)	(5)	(5)	(5)	(5)	(5)
TRACHEA	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
SPECIAL SENSES SYSTEM						
EYE	(5)	(5)	(5)	(5)	(5)	(5)
HARDERIAN GLAND	(5)	(5)	(5)	(5)	(5)	(5)
ZYMBALS GLAND	(5)	(5)	(5)	(5)	(5)	(5)
<hr/>						
URINARY SYSTEM						
KIDNEY	(5)	(5)	(5)	(5)	(5)	(5)
URINARY BLADDER	(5)	(5)	(5)	(5)	(5)	(5)

---

**Study Number:** C16019-02  
**Test Type:** TOX  
**Route:** Dosing in Water  
**Species/Strain:** Mouse/B6C3F1/N

**PA46: Summary of Gross Pathology**  
**Test Compound:** Thallium (I) Sulfate  
**CAS Number:** 7446-18-6

**Date Report Requested:** 01/15/2020  
**Time Report Requested:** 20:50:20  
**Lab:** Battelle

#### LEGEND

---

Number of animals examined for each tissue shown in parentheses.

Number of animals affected given for each observation

Phase day range of terminal sacrifice shown in parentheses in disposition summary

SD – Study Day

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