

**Study Number:** C08004-03

**Test Type:** TOX

**Route:** Dosing in Water

**Species/Strain:** Rat/Harlan Sprague Dawley

**PA05R: Incidence Rates of Neoplastic Lesions with Litter Incidence (Systemic Lesions Abridged)**

**Test Compound:** Vanadyl sulfate

**CAS Number:** 27774-13-6

**Date Report Requested:** 01/18/2022

**Time Report Requested:** 07:42:52

**Lab:** Battelle with EPL

**Study Number:**

C08004-03

**Study Gender:**

Both

**PWG Approval Date:**

See web page for date of PWG Approval

**Version:**

v1.3.5

Study Number: C08004-03

PA05R: Incidence Rates of Neoplastic Lesions with Litter Incidence (Systemic Lesions Abridged)

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CAS Number: 27774-13-6

Lab: Battelle with EPL

Species/Strain: Rat/Harlan Sprague Dawley

F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
<b>Disposition Summary</b>						
Animals Initially In Study	10	10	10	10	10	10
Censored						
Early Deaths						
Survivors						
Scheduled Sacrifice, Terminal	10	10	10	10	10	10
Number Animals Examined Microscopically	10			3	10	10
Total number litters	10			3	10	10
<b>ALIMENTARY SYSTEM</b>						
ESOPHAGUS	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, CECUM	(10)	(0)	(0)	(0)	(10)	(10)
INTESTINE, LARGE, COLON	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, RECTUM	(10)	(0)	(0)	(3)	(0)	(10)
INTESTINE, SMALL, DUODENUM	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, SMALL, ILEUM	(10)	(0)	(0)	(0)	(10)	(10)
INTESTINE, SMALL, JEJUNUM	(10)	(0)	(0)	(0)	(0)	(10)
LIVER	(10)	(0)	(0)	(0)	(1)	(10)
PANCREAS	(10)	(0)	(0)	(0)	(0)	(10)
SALIVARY GLANDS	(10)	(0)	(0)	(0)	(0)	(10)
STOMACH, FORESTOMACH	(10)	(0)	(0)	(0)	(0)	(10)
STOMACH, GLANDULAR	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
AORTA	(10)	(0)	(0)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(0)	(0)	(10)

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Lab: Battelle with EPL

Species/Strain: Rat/Harlan Sprague Dawley

F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
ENDOCRINE SYSTEM						
ADRENAL GLAND	(10)	(0)	(0)	(0)	(0)	(10)
PARATHYROID GLAND	(8)	(0)	(0)	(0)	(0)	(9)
PITUITARY GLAND	(10)	(0)	(0)	(0)	(0)	(10)
THYROID GLAND	(10)	(0)	(0)	(0)	(0)	(10)
GENERAL BODY SYSTEM						
No Tissues/Organs Examined						
GENITAL SYSTEM						
EPIDIDYMIS	(10)	(0)	(0)	(0)	(0)	(10)
PREPUTIAL GLAND	(10)	(0)	(0)	(0)	(0)	(10)
PROSTATE	(10)	(0)	(0)	(0)	(0)	(10)
SEMINAL VESICLE	(10)	(0)	(0)	(0)	(0)	(10)
TESTES	(0)	(0)	(0)	(0)	(0)	(5)
TESTIS	(10)	(0)	(0)	(0)	(0)	(5)
HEMATOLYMPHOID SYSTEM						
BONE MARROW	(10)	(0)	(0)	(0)	(0)	(10)
LYMPH NODE, MANDIBULAR	(10)	(0)	(0)	(0)	(0)	(10)
LYMPH NODE, MESENTERIC	(10)	(0)	(0)	(0)	(0)	(10)
SPLEEN	(10)	(0)	(0)	(0)	(0)	(10)
THYMUS	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
MAMMARY GLAND	(10)	(0)	(0)	(0)	(0)	(9)
SKIN	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
BONE, FEMUR	(10)	(0)	(0)	(0)	(0)	(10)
MUSCLE, THIGH	(10)	(0)	(0)	(0)	(0)	(10)

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Time Report Requested: 07:42:52

Lab: Battelle with EPL

F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
NERVOUS SYSTEM						
BRAIN	(10)	(0)	(0)	(0)	(0)	(10)
NERVE, SCIATIC	(10)	(0)	(0)	(0)	(0)	(10)
NERVE, TIBIAL	(10)	(0)	(0)	(0)	(0)	(10)
SPINAL CORD	(10)	(0)	(0)	(0)	(0)	(10)
TRIGEMINAL GANGLION	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
CAVITY, NASAL	(10)	(0)	(0)	(0)	(0)	(10)
LUNG	(10)	(0)	(0)	(0)	(0)	(9)
TRACHEA	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
EYE	(10)	(0)	(0)	(0)	(0)	(10)
HARDERIAN GLAND	(10)	(0)	(0)	(0)	(0)	(10)
URINARY SYSTEM						
KIDNEY	(10)	(0)	(0)	(0)	(0)	(10)
URINARY BLADDER	(10)	(0)	(0)	(0)	(0)	(10)
No Systemic Lesions						

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA05R: Incidence Rates of Neoplastic Lesions with Litter Incidence (Systemic Lesions Abridged)

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:42:52

Lab: Battelle with EPL

Tumor Summary Data for F1 Male F1 Core Animals	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
Total Animals with Primary Neoplasms	0	0	0	0	0	0
Total Primary Neoplasms	0	0	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0	0	0
Total Benign Neoplasms	0	0	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0	0	0
Total Malignant Neoplasms	0	0	0	0	0	0
Total Animals with Metastatic Neoplasms	0	0	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	0	0

Study Number: C08004-03

PA05R: Incidence Rates of Neoplastic Lesions with Litter Incidence (Systemic Lesions Abridged)

Date Report Requested: 01/18/2022

Test Type: TOX

Test Compound: Vanadyl sulfate

Time Report Requested: 07:42:52

Route: Dosing in Water

CAS Number: 27774-13-6

Lab: Battelle with EPL

Species/Strain: Rat/Harlan Sprague Dawley

F1 Female: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
<b>Disposition Summary</b>						
Animals Initially In Study	10	10	10	10	10	10
Censored						
Early Deaths						
Survivors						
Scheduled Sacrifice, Terminal	10	10	10	10	10	10
Number Animals Examined Microscopically	10		10	10	10	10
Total number litters	10		10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
ESOPHAGUS	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, CECUM	(10)	(0)	(0)	(0)	(10)	(10)
INTESTINE, LARGE, COLON	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, RECTUM	(10)	(0)	(0)	(0)	(1)	(10)
INTESTINE, SMALL, DUODENUM	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, SMALL, ILEUM	(10)	(0)	(10)	(10)	(10)	(10)
INTESTINE, SMALL, JEJUNUM	(10)	(0)	(0)	(0)	(0)	(10)
LIVER	(10)	(0)	(1)	(1)	(0)	(10)
PANCREAS	(10)	(0)	(0)	(0)	(0)	(10)
SALIVARY GLANDS	(10)	(0)	(0)	(0)	(0)	(10)
STOMACH, FORESTOMACH	(10)	(0)	(0)	(0)	(0)	(10)
STOMACH, GLANDULAR	(10)	(0)	(0)	(0)	(0)	(10)
<b>CARDIOVASCULAR SYSTEM</b>						
AORTA	(10)	(0)	(0)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(0)	(0)	(10)

Study Number: C08004-03

PA05R: Incidence Rates of Neoplastic Lesions with Litter Incidence (Systemic Lesions  
Abridged)

Date Report Requested: 01/18/2022

Test Type: TOX

Test Compound: Vanadyl sulfate

Time Report Requested: 07:42:52

Route: Dosing in Water

CAS Number: 27774-13-6

Lab: Battelle with EPL

Species/Strain: Rat/Harlan Sprague Dawley

F1 Female: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
ENDOCRINE SYSTEM						
ADRENAL GLAND	(10)	(0)	(0)	(0)	(0)	(10)
PARATHYROID GLAND	(9)	(0)	(0)	(0)	(0)	(10)
PITUITARY GLAND	(10)	(0)	(0)	(0)	(0)	(10)
THYROID GLAND	(9)	(0)	(0)	(0)	(0)	(10)
GENERAL BODY SYSTEM						
No Tissues/Organs Examined						
GENITAL SYSTEM						
CERVIX	(10)	(0)	(0)	(0)	(0)	(10)
CLITORAL GLAND	(10)	(0)	(0)	(0)	(0)	(9)
OVARY	(10)	(0)	(0)	(0)	(0)	(10)
UTERUS	(10)	(0)	(0)	(0)	(0)	(10)
VAGINA	(10)	(0)	(0)	(0)	(0)	(10)
HEMATOLYMPHOID SYSTEM						
BONE MARROW	(10)	(0)	(0)	(0)	(0)	(10)
LYMPH NODE, MANDIBULAR	(10)	(0)	(0)	(0)	(0)	(10)
LYMPH NODE, MESENTERIC	(10)	(0)	(0)	(0)	(0)	(10)
SPLEEN	(10)	(0)	(0)	(0)	(0)	(10)
THYMUS	(10)	(0)	(0)	(0)	(0)	(10)
INTEGUMENTARY SYSTEM						
MAMMARY GLAND	(10)	(0)	(0)	(0)	(0)	(10)
SKIN	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
BONE, FEMUR	(10)	(0)	(0)	(0)	(0)	(10)
MUSCLE, THIGH	(10)	(0)	(0)	(0)	(0)	(10)

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Species/Strain: Rat/Harlan Sprague Dawley

F1 Female: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
NERVOUS SYSTEM						
BRAIN	(10)	(0)	(0)	(0)	(0)	(10)
NERVE, SCIATIC	(10)	(0)	(0)	(0)	(0)	(10)
NERVE, TIBIAL	(9)	(0)	(0)	(0)	(0)	(10)
SPINAL CORD	(10)	(0)	(0)	(0)	(0)	(10)
TRIGEMINAL GANGLION	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
CAVITY, NASAL	(10)	(0)	(0)	(0)	(0)	(10)
LUNG	(10)	(0)	(0)	(0)	(0)	(10)
TRACHEA	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
EYE	(10)	(0)	(0)	(0)	(0)	(10)
HARDERIAN GLAND	(10)	(0)	(0)	(0)	(0)	(10)
URINARY SYSTEM						
KIDNEY	(10)	(0)	(0)	(0)	(0)	(10)
LEFT; RENAL TUBULE; NEPHROBLASTOMA						1 (10%) [1]
URINARY BLADDER	(10)	(0)	(0)	(0)	(0)	(10)
No Systemic Lesions						



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Species/Strain: Rat/Harlan Sprague Dawley

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Lab: Battelle with EPL

Tumor Summary Data for F1 Female F1 Core Animals	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
Total Animals with Primary Neoplasms	0	0	0	0	0	0
Total Primary Neoplasms	0	0	0	0	0	0
Total Animals with Benign Neoplasms	0	0	0	0	0	0
Total Benign Neoplasms	0	0	0	0	0	0
Total Animals with Malignant Neoplasms	0	0	0	0	0	1
Total Malignant Neoplasms	0	0	0	0	0	1
Total Animals with Metastatic Neoplasms	0	0	0	0	0	0
Total Metastatic Neoplasms	0	0	0	0	0	0
Total Animals with Malignant Neoplasms Uncertain Primary Site	0	0	0	0	0	0

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**Lab:** Battelle with EPL

## LEGEND

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Censored animals are animals not in one of the other disposition categories that are removed prior to the end of the study. The censored animals are included in the pathology data.

Number of animals examined given for each tissue. If none of the animals examined have the specific lesion then there is a blank for that dose group for that specific lesion.

Number of animals with observation reported with percent incidence in parentheses

Systemic lesions are included once in the total lesion count regardless of how many times they occurred in a single animal

Number of litters with observations shown in square brackets for F1 and F2 animals. F1 litter incidence based on the number of F0 dams; F2 litter incidence based on number of F1 dams.

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