

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

Study Number:

Study Gender:

PWG Approval Date:

Version:

PA03R: Non-Neoplastic Lesion Summary with Percent and Litter Incidence

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

C08004-03

Both

See web page for date of PWG Approval

v1.3.5

Date Report Requested: 01/18/2022

Time Report Requested: 07:41:39

Lab: Battelle with EPL

Study Number: C08004-03

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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

Disposition Summary

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

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F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
ALIMENTARY SYSTEM						
ESOPHAGUS	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, CECUM	(10)	(0)	(0)	(0)	(10)	(10)
EPITHELIUM; HYPERPLASIA						4 (40%) [4]
INTESTINE, LARGE, COLON	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, RECTUM	(10)	(0)	(0)	(3)	(0)	(10)
HYPERPLASIA; LYMPHOCYTE				1 (33%) [1]		
INTESTINE, SMALL, DUODENUM	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, SMALL, ILEUM	(10)	(0)	(0)	(0)	(10)	(10)
EPITHELIUM; HYPERPLASIA					3 (30%) [3]	9 (90%) [9]
INTESTINE, SMALL, JEJUNUM	(10)	(0)	(0)	(0)	(0)	(10)
MINERAL						1 (10%) [1]
LIVER	(10)	(0)	(0)	(0)	(1)	(10)
HEPATODIAPHRAGMATIC NODULE	1 (10%) [1]				1 (100%) [1]	
INFILTRATION, CELLULAR; MONONUCLEAR CELL						1 (10%) [1]
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)
MINERAL	7 (70%) [7]					6 (60%) [6]
CARDIOVASCULAR SYSTEM						
AORTA	(10)	(0)	(0)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(0)	(0)	(10)
CARDIOMYOPATHY	1 (10%) [1]					

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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)
CORTEX; CYTOPLASMIC VACUOLATION						1 (10%) [1]
CORTEX; HYPERTROPHY; FOCAL						1 (10%) [1]
PARATHYROID GLAND	(8)	(0)	(0)	(0)	(0)	(9)
PITUITARY GLAND	(10)	(0)	(0)	(0)	(0)	(10)
THYROID GLAND	(10)	(0)	(0)	(0)	(0)	(10)
THYMUS; ECTOPIC TISSUE	1 (10%) [1]					1 (10%) [1]
GENERAL BODY SYSTEM						
No Tissues/Organs Examined						
GENITAL SYSTEM						
EPIDIDYMIS	(10)	(0)	(0)	(0)	(0)	(10)
PREPUTIAL GLAND	(10)	(0)	(0)	(0)	(0)	(10)
INFLAMMATION; CHRONIC-ACTIVE	3 (30%) [3]					2 (20%) [2]
PROSTATE	(10)	(0)	(0)	(0)	(0)	(10)
SEMINAL VESICLE	(10)	(0)	(0)	(0)	(0)	(10)
SECRETORY DEPLETION						1 (10%) [1]
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)
FOLLICLES; LYMPHOCYTE; HYPERPLASIA						1 (10%) [1]
LYMPH NODE, MESENTERIC	(10)	(0)	(0)	(0)	(0)	(10)
SPLEEN	(10)	(0)	(0)	(0)	(0)	(10)
THYMUS	(10)	(0)	(0)	(0)	(0)	(10)

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F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
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)
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)
EOSINOPHILIC CRYSTAL(S)						1 (11%) [1]
EPITHELIUM; ALVEOLUS; HYPERPLASIA						2 (22%) [2]
ALVEOLUS; INFILTRATION, CELLULAR; HISTIOCYTE						1 (11%) [1]
INFLAMMATION; CHRONIC-ACTIVE						1 (11%) [1]
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)
INFILTRATION, CELLULAR; MONONUCLEAR CELL	1 (10%) [1]					1 (10%) [1]

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F1 Male: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
URINARY SYSTEM						
KIDNEY	(10)	(0)	(0)	(0)	(0)	(10)
CHRONIC PROGRESSIVE NEPHROPATHY	10 (100%) [10]					10 (100%) [10]
URINARY BLADDER	(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
Disposition Summary						
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
ALIMENTARY SYSTEM						
ESOPHAGUS	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, CECUM	(10)	(0)	(0)	(0)	(10)	(10)
EPITHELIUM; HYPERPLASIA						4 (40%) [4]
INTESTINE, LARGE, COLON	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, LARGE, RECTUM	(10)	(0)	(0)	(0)	(1)	(10)
HYPERPLASIA; LYMPHOCYTE					1 (100%) [1]	
INTESTINE, SMALL, DUODENUM	(10)	(0)	(0)	(0)	(0)	(10)
INTESTINE, SMALL, ILEUM	(10)	(0)	(10)	(10)	(10)	(10)
EPITHELIUM; HYPERPLASIA					4 (40%) [4]	9 (90%) [9]
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)
MINERAL	4 (40%) [4]					1 (10%) [1]

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F1 Female: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
CARDIOVASCULAR SYSTEM						
AORTA	(10)	(0)	(0)	(0)	(0)	(10)
HEART	(10)	(0)	(0)	(0)	(0)	(10)
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)
THYMUS; ECTOPIC TISSUE						1 (10%) [1]
GENERAL BODY SYSTEM						
No Tissues/Organs Examined						
GENITAL SYSTEM						
CERVIX	(10)	(0)	(0)	(0)	(0)	(10)
CLITORAL GLAND	(10)	(0)	(0)	(0)	(0)	(9)
DUCT; DILATION	1 (10%) [1]					1 (11%) [1]
INFILTRATION, CELLULAR; MONONUCLEAR CELL	3 (30%) [3]					2 (22%) [2]
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)

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F1 Female: F1 Core Animals

	Treatment Groups (mg/L)					
	0	21.0	41.9	83.8	168	335
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)
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)
ALVEOLUS; INFILTRATION, CELLULAR; HISTIOCYTE	1 (10%) [1]					2 (20%) [2]
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)
INFILTRATION, CELLULAR; MONONUCLEAR CELL						2 (20%) [2]
URINARY SYSTEM						
KIDNEY	(10)	(0)	(0)	(0)	(0)	(10)
CHRONIC PROGRESSIVE NEPHROPATHY	5 (50%) [5]					7 (70%) [7]
CORTEX; CYST	1 (10%) [1]					
INFLAMMATION; CHRONIC	1 (10%) [1]					
URINARY BLADDER	(10)	(0)	(0)	(0)	(0)	(10)

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LEGEND

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

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 ****