

Study Number: C08004-03
Test Type: TOX
Route: Dosing in Water
Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data
Test Compound: Vanadyl sulfate
CAS Number: 27774-13-6

Date Report Requested: 01/18/2022
Time Report Requested: 07:46:30
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

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 1	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53621

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
STOMACH, GLANDULAR	TESTIS	THYMUS	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
THYROID GLAND	THYMUS	ECTOPIC TISSUE	

Study Number: C08004-03

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CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 2	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52982

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	TESTIS
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LIVER	HEPATODIAPHRAGMATIC NODULE	
[HEPATODIAPHRAGMATIC NODULE TGLS = TGL 1-18]		
PREPUTIAL GLAND	INFLAMMATION	CHRONIC-ACTIVE, MILD

Animal Note: Nasal discharge is present but is not pathologically significant (not associated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 3	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND123
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52996

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
TESTIS	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 4	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53130

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PITUITARY GLAND	PREPUTIAL GLAND
PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	TESTIS
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

NO SECTION

PARATHYROID GLAND

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

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Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 5	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53142

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PITUITARY GLAND	PREPUTIAL GLAND
PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR
TESTIS	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

NO SECTION

PARATHYROID GLAND

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 6	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53651

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
TESTIS	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Animal Note: Nasal discharge is present but is not pathologically significant (not associated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 7	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53171

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM
LIVER	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	TESTIS	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER

OBSERVATIONS

HEART	CARDIOMYOPATHY	MILD
KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
PREPUTIAL GLAND	INFLAMMATION	CHRONIC-ACTIVE, MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 8	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53183

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HEART	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM
LIVER	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	TESTIS	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER

OBSERVATIONS

HARDERIAN GLAND	INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
PREPUTIAL GLAND	INFLAMMATION	CHRONIC-ACTIVE, MODERATE
STOMACH, GLANDULAR	MINERAL	MODERATE

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 9	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53195

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
TESTIS	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MILD
STOMACH, GLANDULAR	MINERAL	MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 10	TRT#: F1-1	DOSE: 0 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53665

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
TESTIS	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 32

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53417

OBSERVATIONS

INTESTINE, LARGE, RECTUM

NO CORRESPONDING LESION

[NO CORRESPONDING LESION TGLS = TGL 1-NCL]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 34

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53427

OBSERVATIONS

INTESTINE, LARGE, RECTUM

HYPERPLASIA

LYMPHOCYTE, MARKED

[HYPERPLASIA TGLS = TGL 1-15]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 36

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Male

REMOVAL DAY: PND121

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53452

OBSERVATIONS

INTESTINE, LARGE, RECTUM

NO CORRESPONDING LESION

[NO CORRESPONDING LESION TGLS = TGL 1-NCL]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 41

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54024

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 42	TRT#: F1-5	DOSE: 168 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53485

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 43

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND121

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54035

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

OBSERVATIONS

LIVER

HEPATODIAPHRAGMATIC NODULE

[HEPATODIAPHRAGMATIC NODULE TGLS = TGL 1-23]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 44

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND123

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53073

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 45

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54048

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 46

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54078

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 47	TRT#: F1-5	DOSE: 168 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 54111

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 48

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND122

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 52946

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 49	TRT#: F1-5	DOSE: 168 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53504

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 50

TRT#: F1-5

DOSE: 168 mg/L

SEX: Male

REMOVAL DAY: PND121

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54208

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 51	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND123
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53098

TISSUE STATUS

Within Normal Limits

AORTA	BONE MARROW	BONE, FEMUR	BRAIN
CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS	EYE
HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM
LIVER	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND
PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	TESTES
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

OBSERVATIONS

ADRENAL GLAND	CORTEX	HYPERTROPHY	FOCAL, MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR		MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 52	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53982

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS
SEMINAL VESICLE	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	TESTES	THYMUS	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, JEJUNUM		MINERAL	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR		MINERAL	MODERATE
THYROID GLAND	THYMUS	ECTOPIC TISSUE	

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 53	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53517

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
TESTES	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER		

OBSERVATIONS

INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LUNG		EOSINOPHILIC CRYSTAL(S)	MINIMAL
	ALVEOLUS	INFILTRATION, CELLULAR	HISTIOCYTE, MINIMAL
PREPUTIAL GLAND		INFLAMMATION	CHRONIC-ACTIVE, MILD
STOMACH, GLANDULAR		MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 54	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND123
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52971

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM
LIVER	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE
SALIVARY GLANDS	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	TESTES	THYMUS	THYROID GLAND
TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER	

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
SEMINAL VESICLE		SECRETORY DEPLETION	MILD
[SECRETORY DEPLETION TGLS = TGL 1-20]			
STOMACH, GLANDULAR		MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 55	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53917

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HEART	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE	SALIVARY GLANDS
SEMINAL VESICLE	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	STOMACH, GLANDULAR	TESTES	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER

OBSERVATIONS

HARDERIAN GLAND		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LUNG	EPITHELIUM, ALVEOLUS	HYPERPLASIA	MINIMAL

Animal Note: Nasal discharge is present but is not pathologically significant (not associated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 56	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53531

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	TESTIS
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

OBSERVATIONS

INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 57	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53544

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM
LIVER	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PITUITARY GLAND	PROSTATE	SALIVARY GLANDS
SEMINAL VESICLE	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	STOMACH, GLANDULAR	TESTIS	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER

NO SECTION

PARATHYROID GLAND

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
PREPUTIAL GLAND		INFLAMMATION	CHRONIC-ACTIVE, MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 58	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53900

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM
LYMPH NODE, MESENTERIC	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND
PROSTATE	SALIVARY GLANDS	SEMINAL VESICLE	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	TESTIS
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

MISSING

MAMMARY GLAND

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LIVER		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
LUNG	EPITHELIUM, ALVEOLUS	HYPERPLASIA	MINIMAL
		INFLAMMATION	CHRONIC-ACTIVE, MINIMAL
LYMPH NODE, MANDIBULAR	FOLLICLES, LYMPHOCYTE	HYPERPLASIA	MILD
STOMACH, GLANDULAR		MINERAL	MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 59	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND122
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53882

TISSUE STATUS

Within Normal Limits

AORTA	BONE MARROW	BONE, FEMUR	BRAIN
CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS	EYE
HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	TESTIS	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER

OBSERVATIONS

ADRENAL GLAND	CORTEX	CYTOPLASMIC VACUOLATION	MILD
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR		MINERAL	MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 60	TRT#: F1-6	DOSE: 335 mg/L	SEX: Male	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53558

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	EPIDIDYMIS	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	PREPUTIAL GLAND	PROSTATE
SALIVARY GLANDS	SEMINAL VESICLE	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	TESTIS
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER			

OBSERVATIONS

INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 61	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53626

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	OVARY	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 62	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52989

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	THYMUS	THYROID GLAND
TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS
VAGINA			

OBSERVATIONS

CLITORAL GLAND	INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
KIDNEY	INFLAMMATION	CHRONIC, MINIMAL
STOMACH, GLANDULAR	MINERAL	MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 63	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52999

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	OVARY	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 64	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53139

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	KIDNEY	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	OVARY	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

CLITORAL GLAND	INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 65

TRT#: F1-1

DOSE: 0 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53149

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	LIVER	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	THYMUS	THYROID GLAND
TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS
VAGINA			

OBSERVATIONS

KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LUNG	ALVEOLUS	INFILTRATION, CELLULAR	HISTIOCYTE, MINIMAL
STOMACH, GLANDULAR		MINERAL	MINIMAL
TRIGEMINAL GANGLION			

Tissue Comment: Nerve present; ganglion absent.

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 66	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53659

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	KIDNEY	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
STOMACH, GLANDULAR	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS	VAGINA

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 67	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53176

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	KIDNEY	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	OVARY	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER
UTERUS	VAGINA		

OBSERVATIONS

CLITORAL GLAND	INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
STOMACH, GLANDULAR	MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 68	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53191

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	OVARY	PANCREAS	PITUITARY GLAND
SALIVARY GLANDS	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS	VAGINA

NO SECTION

NERVE, TIBIAL	PARATHYROID GLAND	THYROID GLAND
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OBSERVATIONS

KIDNEY	CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 69	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53205

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM	KIDNEY	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

STOMACH, GLANDULAR	MINERAL	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 70	TRT#: F1-1	DOSE: 0 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53670

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, CECUM
INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER
UTERUS	VAGINA		

OBSERVATIONS

CLITORAL GLAND	DUCT	DILATION	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
	CORTEX	CYST	

[CYST TGLS = TGL 1-24]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 71

TRT#: F1-2

DOSE: 21.0 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53223

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 73

TRT#: F1-2

DOSE: 21.0 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53270

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 81

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53770

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 82

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND119

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54149

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 83

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53367

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

OBSERVATIONS

LIVER

NO CORRESPONDING LESION

[NO CORRESPONDING LESION TGLS = TGL 1-NCL]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 84

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53806

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 85

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53380

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 86

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53818

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 87

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53833

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 88

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND121

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53068

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 89

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53414

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 90

TRT#: F1-3

DOSE: 41.9 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53842

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 91

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53878

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 92

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53422

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 93

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53915

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 94

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53430

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 95

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53941

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 96

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53458

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 97

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND119

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54221

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 98

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53973

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 99

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54004

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 100

TRT#: F1-4

DOSE: 83.8 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54015

TISSUE STATUS

Within Normal Limits

INTESTINE, SMALL, ILEUM

OBSERVATIONS

LIVER

NO CORRESPONDING LESION

[NO CORRESPONDING LESION TGLS = TGL 1-NCL]

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 101	TRT#: F1-5	DOSE: 168 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 54031

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MILD

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 102	TRT#: F1-5	DOSE: 168 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53498

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

OBSERVATIONS

INTESTINE, LARGE, RECTUM

HYPERPLASIA

LYMPHOCYTE, MARKED

[HYPERPLASIA TGLS = TGL 1-15]

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 103

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54038

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 104

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND121

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53080

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 105

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54059

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 106

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54081

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 107

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54120

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 108	TRT#: F1-5	DOSE: 168 mg/L	SEX: Female	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52954

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM EPITHELIUM HYPERPLASIA MINIMAL

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 109

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND120

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 53513

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

INTESTINE, SMALL, ILEUM

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 110

TRT#: F1-5

DOSE: 168 mg/L

SEX: Female

REMOVAL DAY: PND119

GENERATION: F1

SELECTION: F1 Core Animals

DISP: Scheduled Removal (Terminal)

HISTO: 54211

TISSUE STATUS

Within Normal Limits

INTESTINE, LARGE, CECUM

OBSERVATIONS

INTESTINE, SMALL, ILEUM

EPITHELIUM

HYPERPLASIA

MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 111	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53105

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER
UTERUS	VAGINA		

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 112	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53987

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, JEJUNUM	KIDNEY	LIVER	LUNG
LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH
NERVE, SCIATIC	NERVE, TIBIAL	OVARY	PANCREAS
PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS	SKIN
SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
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Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 113	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53528

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, JEJUNUM	LIVER	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
OVARY	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
SALIVARY GLANDS	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS	THYROID GLAND
TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS
VAGINA			

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
LUNG	ALVEOLUS	INFILTRATION, CELLULAR	HISTIOCYTE, MINIMAL
TRIGEMINAL GANGLION			

Tissue Comment: Nerve present, ganglion missing.

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 114	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND121
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 52974

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER
UTERUS	VAGINA		

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL

Animal Note: Kinked tail confirmed at necropsy but was not considered pathologically significant (not correlated with a TGL).

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 115	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53928

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
THYMUS	THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

CLITORAL GLAND		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
STOMACH, GLANDULAR		MINERAL	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 116	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53537

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
STOMACH, GLANDULAR	THYMUS	TRACHEA	TRIGEMINAL GANGLION
URINARY BLADDER	UTERUS	VAGINA	

OBSERVATIONS

HARDERIAN GLAND		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MILD
INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL
THYROID GLAND	THYMUS	ECTOPIC TISSUE	

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 117	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53554

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HEART	INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	KIDNEY
LIVER	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
STOMACH, GLANDULAR	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS	VAGINA

OBSERVATIONS

CLITORAL GLAND	DUCT	DILATION	MINIMAL
HARDERIAN GLAND		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
LUNG	ALVEOLUS	INFILTRATION, CELLULAR	HISTIOCYTE, MINIMAL
TRIGEMINAL GANGLION			

Tissue Comment: Nerve present, ganglion missed.

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 118	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53903

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, JEJUNUM	LIVER
LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC	MAMMARY GLAND
MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL	OVARY
PANCREAS	PARATHYROID GLAND	PITUITARY GLAND	SALIVARY GLANDS
SKIN	SPINAL CORD	SPLEEN	STOMACH, FORESTOMACH
STOMACH, GLANDULAR	THYMUS	THYROID GLAND	TRACHEA
TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS	VAGINA

MISSING

CLITORAL GLAND

OBSERVATIONS

INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MILD
KIDNEY	LEFT, RENAL TUBULE	NEPHROBLASTOMA	

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 119	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53891

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	CLITORAL GLAND
ESOPHAGUS	EYE	HARDERIAN GLAND	HEART
INTESTINE, LARGE, CECUM	INTESTINE, LARGE, COLON	INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM
INTESTINE, SMALL, JEJUNUM	LIVER	LUNG	LYMPH NODE, MANDIBULAR
LYMPH NODE, MESENTERIC	MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC
NERVE, TIBIAL	OVARY	PANCREAS	PARATHYROID GLAND
PITUITARY GLAND	SALIVARY GLANDS	SKIN	SPINAL CORD
SPLEEN	STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS
THYROID GLAND	TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER
UTERUS	VAGINA		

OBSERVATIONS

INTESTINE, SMALL, ILEUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 01/18/2022

Time Report Requested: 07:46:30

Lab: Battelle with EPL

ANIMAL ID: 120	TRT#: F1-6	DOSE: 335 mg/L	SEX: Female	REMOVAL DAY: PND120
GENERATION: F1	SELECTION: F1 Core Animals		DISP: Scheduled Removal (Terminal)	HISTO: 53568

TISSUE STATUS

Within Normal Limits

ADRENAL GLAND	AORTA	BONE MARROW	BONE, FEMUR
BRAIN	CAVITY, NASAL	CERVIX	ESOPHAGUS
EYE	HARDERIAN GLAND	HEART	INTESTINE, LARGE, COLON
INTESTINE, LARGE, RECTUM	INTESTINE, SMALL, DUODENUM	INTESTINE, SMALL, ILEUM	INTESTINE, SMALL, JEJUNUM
LIVER	LUNG	LYMPH NODE, MANDIBULAR	LYMPH NODE, MESENTERIC
MAMMARY GLAND	MUSCLE, THIGH	NERVE, SCIATIC	NERVE, TIBIAL
OVARY	PANCREAS	PARATHYROID GLAND	PITUITARY GLAND
SALIVARY GLANDS	SKIN	SPINAL CORD	SPLEEN
STOMACH, FORESTOMACH	STOMACH, GLANDULAR	THYMUS	THYROID GLAND
TRACHEA	TRIGEMINAL GANGLION	URINARY BLADDER	UTERUS
VAGINA			

OBSERVATIONS

CLITORAL GLAND		INFILTRATION, CELLULAR	MONONUCLEAR CELL, MINIMAL
INTESTINE, LARGE, CECUM	EPITHELIUM	HYPERPLASIA	MINIMAL
KIDNEY		CHRONIC PROGRESSIVE NEPHROPATHY	MINIMAL

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA14: Individual Animal Pathology Data

Test Compound: Vanadyl sulfate

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LEGEND

SD – Study Day; GD – Gestation Day; LD – Lactation Day; PND – Postnatal Day, adults post-weaning

**** END OF REPORT ****