

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

**R06: Andrology Summary**  
**Test Compound:** Vanadyl sulfate  
**CAS Number:** 27774-13-6

**Date Report Requested:** 08/02/2021  
**Time Report Requested:** 07:23:06  
**Lab:** Battelle

**Study Number:** C08004-03  
**Study Gender:** Both  
**PWG Approval Date:** See web page for date of PWG Approval  
**Version:** v1.2.8  
**Stat Version:** S

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				Male			
Generation	Terminal Sac	Cohort		Treatment Groups (mg/L)			
				0	83.8	168	335
F1	PND 121 - 123	F1 Core Animals	No. Examined	10	10	10	10
			Testicular Spermatid Count (10 <sup>6</sup> )	171.8 ± 6.7	176.3 ± 5.6	164.7 ± 7.4	173.8 ± 5.8
			Testicular Spermatid Count per g Testis (10 <sup>6</sup> /g)	92.9 ± 3.7	93.9 ± 3.9	93.1 ± 3.9	91.0 ± 3.2
			Percent Motile Sperm	81.2 ± 1.9	85.5 ± 1.9	80.4 ± 1.5	81.8 ± 1.7
			Percent Progressively Motile Sperm	77.3 ± 1.9	81.5 ± 2.0	77.2 ± 1.6	78.0 ± 2.0
			Cauda Weight (g)	0.275 ± 0.004 **	0.285 ± 0.006	0.295 ± 0.006 *	0.296 ± 0.007 *
			Cauda Epididymis Sperm Count (10 <sup>6</sup> )	128.6 ± 14.8	158.1 ± 12.6	147.0 ± 16.2	137.9 ± 19.2
			Cauda Epididymis Sperm Count per g Cauda (10 <sup>6</sup> /g)	464.5 ± 50.9	557.9 ± 46.1	493.2 ± 49.0	463.1 ± 61.8
			Amplitude of Lateral Head Displacement (um)	17.72 ± 0.49	18.31 ± 0.50	18.47 ± 0.39	18.48 ± 0.36
			Average Path Velocity (um/second)	149.08 ± 2.80	153.48 ± 3.76	155.39 ± 4.43	155.19 ± 3.06
			Curvilinear Velocity (um/second)	282.10 ± 9.88	291.83 ± 10.55	293.69 ± 10.40	290.70 ± 8.18
			Percent Linearity	37.6 ± 1.0	37.7 ± 0.9	38.0 ± 0.5	37.9 ± 0.8
			Straight Line Velocity (um/second)	102.49 ± 2.03	105.18 ± 2.35	108.00 ± 3.70	107.28 ± 2.64
			Percent Straightness	68.1 ± 1.2	68.5 ± 0.7	69.1 ± 0.6	68.6 ± 0.9

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## LEGEND

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Data are displayed as mean  $\pm$  SEM.

Statistical analysis of the F1 organ weight endpoints performed using Jonckheere trend test and Williams or Dunnett for pairwise tests. Statistical analysis for all other F1 endpoints performed using Jonckheere trend test and Shirley or Dunn for pairwise tests.

Statistical significance for the control group indicates a significant trend test

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

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