

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

PA43: Hematology Summary
Test Compound: Vanadyl sulfate
CAS Number: 27774-13-6

Date Report Requested: 08/02/2021
Time Report Requested: 07:56:35
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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Lab: Battelle

F1 Male: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Hematocrit (%)	PND 120 - 123	47.8 ± 1.0 (9)	48.2 ± 0.5 (10)	48.4 ± 0.6 (10)	49.1 ± 0.3 (9)
Percent of Control			100.8	101.4	102.9
Manual Hematocrit (%)	PND 120 - 123	48.2 ± 0.8 (9)	48.8 ± 0.6 (10)	48.8 ± 0.4 (10)	49.7 ± 0.3 (9)
Percent of Control			101.2	101.2	103.0
Hemoglobin (g/dL)	PND 120 - 123	14.7 ± 0.2 (9)	15.0 ± 0.1 (10)	14.9 ± 0.2 (10)	14.8 ± 0.1 (9)
Percent of Control			102.3	101.8	101.1
Erythrocytes (10 ⁶ /uL)	PND 120 - 123	8.43 ± 0.12 (9) *	8.58 ± 0.06 (10)	8.49 ± 0.11 (10)	8.62 ± 0.09 (9)
Percent of Control			101.8	100.6	102.2
Reticulocytes (10 ³ /uL)	PND 120 - 123	211.1 ± 12.6 (9)	198.8 ± 6.1 (10)	202.7 ± 5.2 (10)	208.3 ± 6.3 (9)
Percent of Control			94.2	96.0	98.7
Mean Cell Volume (fL)	PND 120 - 123	56.6 ± 0.6 (9)	56.1 ± 0.5 (10)	57.1 ± 0.5 (10)	57.0 ± 0.4 (9)
Percent of Control			99.1	100.9	100.7
Mean Cell Hemoglobin (pg)	PND 120 - 123	17.4 ± 0.1 (9) *	17.5 ± 0.2 (10)	17.6 ± 0.2 (10)	17.4 ± 0.1 (9)
Percent of Control			100.3	101.0	100.1
Mean Cell Hemoglobin Concentration (g/dL)	PND 120 - 123	30.8 ± 0.2 (9)	31.1 ± 0.2 (10)	30.8 ± 0.2 (10)	30.6 ± 0.1 (9)
Percent of Control			101.2	100.1	99.4
Platelets (10 ³ /uL)	PND 120 - 123	707 ± 62 (9)	777 ± 47 (10)	795 ± 23 (10)	732 ± 23 (9)
Percent of Control			109.9	112.4	103.5

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Lab: Battelle

F1 Male: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
White Blood Cells (10 ³ /uL)	PND 120 - 123	9.35 ± 0.80 (9)	9.76 ± 0.49 (10)	10.92 ± 0.68 (10)	9.35 ± 0.81 (9)
Percent of Control			104.4	116.9	100.0
Neutrophils (10 ³ /uL)	PND 120 - 123	1.14 ± 0.16 (9)	0.98 ± 0.11 (10)	0.82 ± 0.06 (10)	0.86 ± 0.06 (9)
Percent of Control			86.4	71.8	75.7
Lymphocytes (10 ³ /uL)	PND 120 - 123	7.64 ± 0.74 (9)	8.08 ± 0.40 (10)	9.49 ± 0.56 (10)	7.92 ± 0.73 (9)
Percent of Control			105.8	124.2	103.7
Monocytes (10 ³ /uL)	PND 120 - 123	0.30 ± 0.04 (9)	0.41 ± 0.05 (10)	0.37 ± 0.05 (10)	0.34 ± 0.03 (9)
Percent of Control			139.0	123.2	115.3
Basophils (10 ³ /uL)	PND 120 - 123	0.05 ± 0.01 (9)	0.05 ± 0.01 (10)	0.07 ± 0.01 (10)	0.05 ± 0.01 (9)
Percent of Control			112.0	142.7	117.1
Eosinophils (10 ³ /uL)	PND 120 - 123	0.16 ± 0.06 (9)	0.16 ± 0.04 (10)	0.11 ± 0.03 (10)	0.11 ± 0.03 (9)
Percent of Control			101.3	66.7	67.8
Large Unstained Cells (10 ³ /uL)	PND 120 - 123	0.06 ± 0.01 (9)	0.07 ± 0.01 (10)	0.07 ± 0.01 (10)	0.06 ± 0.01 (9)
Percent of Control			105.5	114.8	100.0

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Lab: Battelle

F1 Male: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Hematocrit (%)	PND 120 - 123	48.3 ± 0.6 (10)	48.6 ± 0.6 (10)
Percent of Control		101.1	101.7
Manual Hematocrit (%)	PND 120 - 123	48.9 ± 0.7 (10)	49.3 ± 0.7 (10)
Percent of Control		101.4	102.2
Hemoglobin (g/dL)	PND 120 - 123	14.8 ± 0.1 (10)	14.9 ± 0.2 (10)
Percent of Control		101.3	101.3
Erythrocytes (10 ⁶ /uL)	PND 120 - 123	8.66 ± 0.11 (10)	8.71 ± 0.05 (10)
Percent of Control		102.7	103.3
Reticulocytes (10 ³ /uL)	PND 120 - 123	205.4 ± 5.4 (10)	218.7 ± 5.5 (10)
Percent of Control		97.3	103.6
Mean Cell Volume (fL)	PND 120 - 123	55.7 ± 0.5 (10)	55.8 ± 0.6 (10)
Percent of Control		98.5	98.6
Mean Cell Hemoglobin (pg)	PND 120 - 123	17.1 ± 0.1 (10)	17.0 ± 0.1 (10)
Percent of Control		98.4	98.0
Mean Cell Hemoglobin Concentration (g/dL)	PND 120 - 123	30.7 ± 0.2 (10)	30.6 ± 0.2 (10)
Percent of Control		99.9	99.4
Platelets (10 ³ /uL)	PND 120 - 123	813 ± 22 (10)	842 ± 39 (10)
Percent of Control		114.9	119.0

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Lab: Battelle

F1 Male: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
White Blood Cells (10 ³ /uL)	PND 120 - 123	10.78 ± 0.40 (10)	9.24 ± 0.71 (10)
Percent of Control		115.4	98.8
Neutrophils (10 ³ /uL)	PND 120 - 123	0.97 ± 0.08 (10)	1.02 ± 0.07 (10)
Percent of Control		85.3	89.4
Lymphocytes (10 ³ /uL)	PND 120 - 123	9.20 ± 0.35 (10)	7.71 ± 0.64 (10)
Percent of Control		120.4	100.9
Monocytes (10 ³ /uL)	PND 120 - 123	0.38 ± 0.04 (10)	0.32 ± 0.05 (10)
Percent of Control		129.0	108.5
Basophils (10 ³ /uL)	PND 120 - 123	0.07 ± 0.01 (10)	0.05 ± 0.00 (10)
Percent of Control		155.9	107.6
Eosinophils (10 ³ /uL)	PND 120 - 123	0.09 ± 0.01 (10)	0.09 ± 0.02 (10)
Percent of Control		55.4	54.1
Large Unstained Cells (10 ³ /uL)	PND 120 - 123	0.07 ± 0.01 (10)	0.06 ± 0.01 (10)
Percent of Control		114.8	88.4

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Lab: Battelle

F1 Male: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Hematocrit (%)	PND 28	41.9 ± 0.8 (10)	40.9 ± 0.8 (10)	42.0 ± 0.9 (10)	42.7 ± 0.9 (10)
Percent of Control			97.6	100.4	101.9
Manual Hematocrit (%)	PND 28	42.6 ± 1.0 (10)	41.8 ± 0.7 (10)	42.8 ± 0.7 (10)	43.6 ± 1.0 (10)
Percent of Control			98.2	100.6	102.5
Hemoglobin (g/dL)	PND 28	12.6 ± 0.2 (10)	12.3 ± 0.2 (10)	12.6 ± 0.2 (10)	12.7 ± 0.2 (10)
Percent of Control			97.9	100.2	101.3
Erythrocytes (10 ⁶ /uL)	PND 28	6.18 ± 0.13 (10) *	5.92 ± 0.09 (10)	6.01 ± 0.11 (10)	6.18 ± 0.11 (10)
Percent of Control			95.8	97.2	100.1
Reticulocytes (10 ³ /uL)	PND 28	647.8 ± 18.4 (10)	621.7 ± 21.4 (10)	665.2 ± 16.8 (10)	663.1 ± 23.5 (10)
Percent of Control			96.0	102.7	102.4
Mean Cell Volume (fL)	PND 28	67.8 ± 0.9 (10)	69.1 ± 0.6 (10)	70.0 ± 0.5 (10)	69.0 ± 0.6 (10)
Percent of Control			101.8	103.3	101.8
Mean Cell Hemoglobin (pg)	PND 28	20.4 ± 0.2 (10) **	20.8 ± 0.1 (10)	21.0 ± 0.1 (10)	20.6 ± 0.1 (10)
Percent of Control			102.1	103.0	101.0
Mean Cell Hemoglobin Concentration (g/dL)	PND 28	30.0 ± 0.2 (10)	30.1 ± 0.2 (10)	30.0 ± 0.1 (10)	29.8 ± 0.2 (10)
Percent of Control			100.3	99.8	99.3
Platelets (10 ³ /uL)	PND 28	862 ± 25 (10) **	922 ± 21 (10)	862 ± 52 (10)	959 ± 37 (10)
Percent of Control			107.0	100.1	111.3
White Blood Cells (10 ³ /uL)	PND 28	7.31 ± 0.69 (10)	6.77 ± 0.21 (10)	7.52 ± 0.37 (10)	6.36 ± 0.34 (10)
Percent of Control			92.5	102.8	87.0
Neutrophils (10 ³ /uL)	PND 28	0.67 ± 0.04 (10)	0.58 ± 0.02 (10)	0.66 ± 0.04 (10)	0.62 ± 0.06 (10)
Percent of Control			86.9	98.9	92.5

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Lab: Battelle

F1 Male: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Lymphocytes (10 ³ /uL)	PND 28	6.26 ± 0.61 (10)	5.82 ± 0.20 (10)	6.44 ± 0.32 (10)	5.38 ± 0.28 (10)
Percent of Control			93.0	102.9	85.9
Monocytes (10 ³ /uL)	PND 28	0.23 ± 0.03 (10)	0.24 ± 0.01 (10)	0.26 ± 0.02 (10)	0.21 ± 0.01 (10)
Percent of Control			102.6	110.8	92.2
Basophils (10 ³ /uL)	PND 28	0.08 ± 0.01 (10)	0.06 ± 0.00 (10)	0.07 ± 0.01 (10)	0.07 ± 0.01 (10)
Percent of Control			82.0	98.7	86.7
Eosinophils (10 ³ /uL)	PND 28	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)	0.04 ± 0.01 (10)
Percent of Control			83.6	101.6	145.9
Large Unstained Cells (10 ³ /uL)	PND 28	0.05 ± 0.01 (10)	0.04 ± 0.00 (10)	0.05 ± 0.00 (10)	0.04 ± 0.00 (10)
Percent of Control			86.0	106.0	87.0

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Lab: Battelle

F1 Male: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Hematocrit (%)	PND 28	42.4 ± 0.7 (10)	42.7 ± 0.9 (10)
Percent of Control		101.3	101.9
Manual Hematocrit (%)	PND 28	42.8 ± 1.0 (10)	43.4 ± 0.8 (10)
Percent of Control		100.6	102.0
Hemoglobin (g/dL)	PND 28	12.7 ± 0.2 (10)	12.7 ± 0.2 (10)
Percent of Control		101.0	101.2
Erythrocytes (10 ⁶ /uL)	PND 28	6.22 ± 0.11 (10)	6.37 ± 0.13 (10)
Percent of Control		100.7	103.1
Reticulocytes (10 ³ /uL)	PND 28	646.2 ± 15.5 (10)	645.5 ± 16.4 (10)
Percent of Control		99.8	99.6
Mean Cell Volume (fL)	PND 28	68.1 ± 0.4 (10)	67.0 ± 0.5 (10)
Percent of Control		100.5	98.8
Mean Cell Hemoglobin (pg)	PND 28	20.4 ± 0.1 (10)	20.0 ± 0.1 (10)
Percent of Control		100.0	98.1
Mean Cell Hemoglobin Concentration (g/dL)	PND 28	29.9 ± 0.1 (10)	29.8 ± 0.1 (10)
Percent of Control		99.6	99.2
Platelets (10 ³ /uL)	PND 28	941 ± 52 (10)	1003 ± 58 (10) *
Percent of Control		109.2	116.4
White Blood Cells (10 ³ /uL)	PND 28	7.80 ± 0.24 (10)	7.03 ± 0.48 (10)
Percent of Control		106.6	96.1
Neutrophils (10 ³ /uL)	PND 28	0.90 ± 0.08 (10)	0.77 ± 0.06 (10)
Percent of Control		134.7	114.9

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Lab: Battelle

F1 Male: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Lymphocytes (10 ³ /uL)	PND 28	6.47 ± 0.17 (10)	5.88 ± 0.41 (10)
Percent of Control		103.4	93.9
Monocytes (10 ³ /uL)	PND 28	0.25 ± 0.01 (10)	0.24 ± 0.02 (10)
Percent of Control		109.5	102.2
Basophils (10 ³ /uL)	PND 28	0.08 ± 0.01 (10)	0.07 ± 0.01 (10)
Percent of Control		108.0	90.7
Eosinophils (10 ³ /uL)	PND 28	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)
Percent of Control		109.8	90.2
Large Unstained Cells (10 ³ /uL)	PND 28	0.05 ± 0.00 (10)	0.05 ± 0.01 (10)
Percent of Control		108.0	94.0

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Lab: Battelle

F1 Female: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Hematocrit (%)	PND 119 - 121	45.8 ± 1.0 (10)	47.0 ± 0.6 (10)	46.4 ± 0.7 (10)	46.6 ± 1.0 (10)
Percent of Control			102.6	101.3	101.7
Manual Hematocrit (%)	PND 119 - 121	44.3 ± 0.5 (10)	45.3 ± 0.6 (10)	45.1 ± 0.4 (10)	45.2 ± 0.6 (10)
Percent of Control			102.3	101.8	102.0
Hemoglobin (g/dL)	PND 119 - 121	14.2 ± 0.2 (10)	14.6 ± 0.1 (10)	14.4 ± 0.2 (10)	14.5 ± 0.2 (10)
Percent of Control			102.6	101.6	101.9
Erythrocytes (10 ⁶ /uL)	PND 119 - 121	8.00 ± 0.15 (10)	8.14 ± 0.07 (10)	7.92 ± 0.08 (10)	8.21 ± 0.12 (10)
Percent of Control			101.7	99.0	102.6
Reticulocytes (10 ³ /uL)	PND 119 - 121	195.6 ± 10.7 (10)	186.6 ± 6.8 (10)	207.6 ± 8.8 (10)	181.5 ± 9.8 (10)
Percent of Control			95.4	106.1	92.8
Mean Cell Volume (fL)	PND 119 - 121	57.3 ± 0.6 (10)	57.8 ± 0.5 (10)	58.6 ± 0.4 (10)	56.7 ± 0.6 (10)
Percent of Control			100.9	102.3	99.1
Mean Cell Hemoglobin (pg)	PND 119 - 121	17.8 ± 0.2 (10)	17.9 ± 0.1 (10)	18.2 ± 0.1 (10)	17.6 ± 0.2 (10)
Percent of Control			100.8	102.4	99.3
Mean Cell Hemoglobin Concentration (g/dL)	PND 119 - 121	31.0 ± 0.3 (10)	31.0 ± 0.2 (10)	31.1 ± 0.2 (10)	31.1 ± 0.2 (10)
Percent of Control			99.8	100.2	100.2
Platelets (10 ³ /uL)	PND 119 - 121	750 ± 25 (10) *	811 ± 45 (10)	780 ± 44 (10)	829 ± 35 (10)
Percent of Control			108.1	104.0	110.5

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F1 Female: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
White Blood Cells (10 ³ /uL)	PND 119 - 121	7.09 ± 0.67 (10)	6.41 ± 0.56 (10)	7.32 ± 0.82 (10)	7.13 ± 0.69 (10)
Percent of Control			90.4	103.3	100.6
Neutrophils (10 ³ /uL)	PND 119 - 121	0.93 ± 0.17 (10)	0.72 ± 0.10 (10)	0.66 ± 0.11 (10)	0.74 ± 0.13 (10)
Percent of Control			77.2	70.9	79.6
Lymphocytes (10 ³ /uL)	PND 119 - 121	5.69 ± 0.48 (10)	5.33 ± 0.46 (10)	6.30 ± 0.68 (10)	5.98 ± 0.58 (10)
Percent of Control			93.7	110.8	105.2
Monocytes (10 ³ /uL)	PND 119 - 121	0.29 ± 0.05 (10)	0.20 ± 0.03 (10)	0.21 ± 0.03 (10)	0.25 ± 0.03 (10)
Percent of Control			70.1	71.1	85.9
Basophils (10 ³ /uL)	PND 119 - 121	0.03 ± 0.00 (10)	0.02 ± 0.00 (10)	0.03 ± 0.01 (10)	0.03 ± 0.00 (10)
Percent of Control			92.6	107.4	111.1
Eosinophils (10 ³ /uL)	PND 119 - 121	0.12 ± 0.05 (10) *	0.10 ± 0.01 (10)	0.08 ± 0.01 (10)	0.08 ± 0.01 (10)
Percent of Control			82.6	67.8	72.2
Large Unstained Cells (10 ³ /uL)	PND 119 - 121	0.04 ± 0.01 (10)	0.04 ± 0.01 (10)	0.05 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control			111.1	125.0	127.8

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Lab: Battelle

F1 Female: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Hematocrit (%)	PND 119 - 121	46.0 ± 0.4 (10)	46.7 ± 1.0 (10)
Percent of Control		100.4	101.9
Manual Hematocrit (%)	PND 119 - 121	44.9 ± 0.5 (10)	45.2 ± 0.8 (10)
Percent of Control		101.4	102.0
Hemoglobin (g/dL)	PND 119 - 121	14.3 ± 0.1 (10)	14.4 ± 0.2 (10)
Percent of Control		101.1	101.1
Erythrocytes (10 ⁶ /uL)	PND 119 - 121	8.04 ± 0.06 (10)	8.12 ± 0.09 (10)
Percent of Control		100.5	101.5
Reticulocytes (10 ³ /uL)	PND 119 - 121	200.1 ± 9.8 (10)	192.1 ± 8.7 (10)
Percent of Control		102.3	98.2
Mean Cell Volume (fL)	PND 119 - 121	57.2 ± 0.4 (10)	57.5 ± 0.7 (10)
Percent of Control		99.9	100.3
Mean Cell Hemoglobin (pg)	PND 119 - 121	17.8 ± 0.1 (10)	17.7 ± 0.2 (10)
Percent of Control		100.5	99.5
Mean Cell Hemoglobin Concentration (g/dL)	PND 119 - 121	31.2 ± 0.2 (10)	30.8 ± 0.2 (10)
Percent of Control		100.5	99.2
Platelets (10 ³ /uL)	PND 119 - 121	851 ± 38 (10)	848 ± 41 (10)
Percent of Control		113.4	113.0

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Lab: Battelle

F1 Female: F1 Core Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
White Blood Cells (10 ³ /uL)	PND 119 - 121	7.92 ± 0.89 (10)	5.77 ± 0.65 (10)
Percent of Control		111.8	81.4
Neutrophils (10 ³ /uL)	PND 119 - 121	0.85 ± 0.14 (10)	0.74 ± 0.16 (10)
Percent of Control		91.2	79.3
Lymphocytes (10 ³ /uL)	PND 119 - 121	6.62 ± 0.71 (10)	4.74 ± 0.50 (10)
Percent of Control		116.4	83.4
Monocytes (10 ³ /uL)	PND 119 - 121	0.29 ± 0.05 (10)	0.19 ± 0.03 (10)
Percent of Control		100.7	63.6
Basophils (10 ³ /uL)	PND 119 - 121	0.03 ± 0.01 (10)	0.02 ± 0.00 (10)
Percent of Control		125.9	81.5
Eosinophils (10 ³ /uL)	PND 119 - 121	0.08 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control		68.7	46.1
Large Unstained Cells (10 ³ /uL)	PND 119 - 121	0.05 ± 0.01 (10)	0.03 ± 0.01 (10)
Percent of Control		136.1	91.7

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CAS Number: 27774-13-6

Date Report Requested: 08/02/2021

Time Report Requested: 07:56:35

Lab: Battelle

F1 Female: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Hematocrit (%)	PND 28	42.6 ± 0.7 (10)	42.5 ± 1.0 (10)	42.3 ± 0.8 (10)	43.7 ± 0.8 (10)
Percent of Control			99.8	99.1	102.4
Manual Hematocrit (%)	PND 28	44.0 ± 0.7 (10)	43.6 ± 0.6 (10)	43.8 ± 1.0 (10)	44.8 ± 0.7 (10)
Percent of Control			99.2	99.5	101.9
Hemoglobin (g/dL)	PND 28	12.8 ± 0.2 (10)	12.8 ± 0.3 (10)	12.7 ± 0.2 (10)	13.1 ± 0.2 (10)
Percent of Control			100.0	99.3	102.1
Erythrocytes (10 ⁶ /uL)	PND 28	6.27 ± 0.09 (10)	6.25 ± 0.12 (10)	6.09 ± 0.11 (10)	6.40 ± 0.08 (10)
Percent of Control			99.7	97.2	102.1
Reticulocytes (10 ³ /uL)	PND 28	627.7 ± 16.1 (10)	577.2 ± 27.8 (10)	608.0 ± 12.3 (10)	598.7 ± 16.4 (10)
Percent of Control			92.0	96.9	95.4
Mean Cell Volume (fL)	PND 28	68.0 ± 0.7 (10)	68.0 ± 0.7 (10)	69.3 ± 0.3 (10)	68.2 ± 0.6 (10)
Percent of Control			100.1	101.9	100.3
Mean Cell Hemoglobin (pg)	PND 28	20.5 ± 0.1 (10) **	20.5 ± 0.1 (10)	20.9 ± 0.1 (10)	20.5 ± 0.1 (10)
Percent of Control			100.2	102.0	99.9
Mean Cell Hemoglobin Concentration (g/dL)	PND 28	30.2 ± 0.1 (10)	30.2 ± 0.2 (10)	30.2 ± 0.1 (10)	30.0 ± 0.1 (10)
Percent of Control			100.2	100.1	99.6
Platelets (10 ³ /uL)	PND 28	791 ± 17 (10) **	831 ± 40 (10)	809 ± 58 (10)	904 ± 28 (10) *
Percent of Control			105.1	102.4	114.4
White Blood Cells (10 ³ /uL)	PND 28	7.13 ± 0.56 (10)	7.04 ± 0.37 (10)	7.46 ± 0.40 (10)	6.72 ± 0.29 (10)
Percent of Control			98.8	104.6	94.3
Neutrophils (10 ³ /uL)	PND 28	0.69 ± 0.06 (10) *	0.59 ± 0.05 (10)	0.68 ± 0.05 (10)	0.60 ± 0.05 (10)
Percent of Control			85.7	97.8	86.2

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA43: Hematology Summary

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 08/02/2021

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Lab: Battelle

F1 Female: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)			
		0	21	41.9	83.8
Lymphocytes (10 ³ /uL)	PND 28	6.04 ± 0.46 (10)	6.06 ± 0.32 (10)	6.36 ± 0.33 (10)	5.70 ± 0.22 (10)
Percent of Control			100.3	105.3	94.4
Monocytes (10 ³ /uL)	PND 28	0.22 ± 0.03 (10)	0.23 ± 0.02 (10)	0.24 ± 0.02 (10)	0.24 ± 0.02 (10)
Percent of Control			101.6	108.3	108.3
Basophils (10 ³ /uL)	PND 28	0.08 ± 0.01 (10)	0.08 ± 0.01 (10)	0.08 ± 0.01 (10)	0.08 ± 0.01 (10)
Percent of Control			96.3	95.7	101.2
Eosinophils (10 ³ /uL)	PND 28	0.04 ± 0.01 (10)	0.04 ± 0.00 (10)	0.05 ± 0.02 (10)	0.04 ± 0.01 (10)
Percent of Control			89.8	123.9	101.1
Large Unstained Cells (10 ³ /uL)	PND 28	0.05 ± 0.01 (10)	0.04 ± 0.00 (10)	0.05 ± 0.00 (10)	0.05 ± 0.00 (10)
Percent of Control			88.7	93.8	95.9

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA43: Hematology Summary

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Date Report Requested: 08/02/2021

Time Report Requested: 07:56:35

Lab: Battelle

F1 Female: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Hematocrit (%)	PND 28	41.9 ± 0.8 (10)	42.8 ± 0.6 (10)
Percent of Control		98.3	100.4
Manual Hematocrit (%)	PND 28	43.4 ± 1.1 (10)	43.8 ± 0.5 (10)
Percent of Control		98.6	99.7
Hemoglobin (g/dL)	PND 28	12.7 ± 0.2 (10)	12.8 ± 0.2 (10)
Percent of Control		98.9	100.0
Erythrocytes (10 ⁶ /uL)	PND 28	6.28 ± 0.10 (10)	6.39 ± 0.10 (10)
Percent of Control		100.3	101.9
Reticulocytes (10 ³ /uL)	PND 28	585.4 ± 22.0 (10)	587.6 ± 24.8 (10)
Percent of Control		93.3	93.6
Mean Cell Volume (fL)	PND 28	66.7 ± 0.4 (10)	67.0 ± 0.4 (10)
Percent of Control		98.0	98.6
Mean Cell Hemoglobin (pg)	PND 28	20.2 ± 0.1 (10)	20.1 ± 0.1 (10)
Percent of Control		98.6	98.0
Mean Cell Hemoglobin Concentration (g/dL)	PND 28	30.3 ± 0.1 (10)	30.0 ± 0.1 (10)
Percent of Control		100.6	99.5
Platelets (10 ³ /uL)	PND 28	897 ± 36 (10) *	976 ± 62 (10) *
Percent of Control		113.4	123.4
White Blood Cells (10 ³ /uL)	PND 28	8.47 ± 0.58 (10)	7.06 ± 0.48 (10)
Percent of Control		118.8	99.1
Neutrophils (10 ³ /uL)	PND 28	0.97 ± 0.07 (10) *	0.83 ± 0.08 (10)
Percent of Control		139.2	119.1

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

PA43: Hematology Summary

Test Compound: Vanadyl sulfate

CAS Number: 27774-13-6

Date Report Requested: 08/02/2021

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Lab: Battelle

F1 Female: F1 Interim Animals

	Phase Day	Treatment Groups (mg/L)	
		168	335
Lymphocytes (10 ³ /uL)	PND 28	6.99 ± 0.50 (10)	5.80 ± 0.41 (10)
Percent of Control		115.7	96.0
Monocytes (10 ³ /uL)	PND 28	0.30 ± 0.02 (10)	0.26 ± 0.02 (10)
Percent of Control		136.9	114.8
Basophils (10 ³ /uL)	PND 28	0.10 ± 0.01 (10)	0.08 ± 0.01 (10)
Percent of Control		118.6	93.8
Eosinophils (10 ³ /uL)	PND 28	0.05 ± 0.01 (10)	0.06 ± 0.02 (10)
Percent of Control		115.9	138.6
Large Unstained Cells (10 ³ /uL)	PND 28	0.07 ± 0.01 (10)	0.05 ± 0.00 (10)
Percent of Control		137.1	100.0

Study Number: C08004-03

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

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LEGEND

Values given as mean +/- SEM (number of animals) for the F1 Core animals, and as the mean of the litter mean +/- SEM of the litter mean (number of litters) for the F1 Interim animals. Percent of Control calculated by (dosed group mean / control group mean) x 100.

For F1 Core Animals statistical analysis were performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests.

For the F1 Interim Animals statistical analysis performed using a bootstrapped Jonckheere test for trend and a Datta-Satten modified Wilcoxon test with Hommel adjustment for pairwise comparisons.

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 ****