

Study Number: C08010-01
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

C Number: C08010-01
Study Gender: Both
PWG Approval Date See web page for date of PWG Approval

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Male

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 3	46.8 ± 1.0 (10)	47.4 ± 0.5 (10)	45.3 ± 0.6 (9)	45.6 ± 0.6 (10)
Percent of Control			101.2	96.8	97.3
Manual Hematocrit (%)	SD 3	46.7 ± 1.0 (10)	47.1 ± 0.4 (10)	45.5 ± 0.6 (9)	46.1 ± 0.7 (10)
Percent of Control			101.0	97.5	98.7
Hemoglobin (g/dL)	SD 3	13.8 ± 0.3 (10)	14.0 ± 0.2 (10)	13.5 ± 0.2 (9)	13.5 ± 0.2 (10)
Percent of Control			101.5	98.0	98.0
Erythrocytes (10 ⁶ /uL)	SD 3	7.10 ± 0.14 (10)	7.24 ± 0.07 (10)	6.89 ± 0.11 (9)	6.99 ± 0.10 (10)
Percent of Control			101.9	97.0	98.3
Reticulocytes (10 ³ /uL)	SD 3	626.0 ± 28.9 (10)	634.6 ± 24.9 (10)	662.7 ± 17.8 (9)	593.6 ± 22.4 (10)
Percent of Control			101.4	105.9	94.8
Mean Cell Volume (fL)	SD 3	65.9 ± 0.6 (10)	65.5 ± 0.7 (10)	65.9 ± 0.3 (9)	65.3 ± 0.5 (10)
Percent of Control			99.3	99.9	99.0
Mean Cell Hemoglobin (pg)	SD 3	19.5 ± 0.2 (10)	19.4 ± 0.2 (10)	19.6 ± 0.2 (9)	19.4 ± 0.2 (10)
Percent of Control			99.5	100.9	99.6
Mean Cell Hemoglobin Concentration (g/dL)	SD 3	29.5 ± 0.2 (10) **	29.6 ± 0.2 (10)	29.8 ± 0.2 (9)	29.7 ± 0.2 (10)
Percent of Control			100.2	101.1	100.6
Platelets (10 ³ /uL)	SD 3	896 ± 29 (10)	866 ± 50 (10)	885 ± 32 (9)	928 ± 40 (10)
Percent of Control			96.6	98.8	103.6
White Blood Cells (10 ³ /uL)	SD 3	10.86 ± 0.77 (10)	10.38 ± 0.92 (10)	9.24 ± 0.60 (9)	10.07 ± 0.61 (10)
Percent of Control			95.6	85.1	92.8
Neutrophils (10 ³ /uL)	SD 3	1.11 ± 0.12 (10)	1.06 ± 0.10 (10)	0.95 ± 0.12 (9)	1.08 ± 0.15 (10)
Percent of Control			95.4	85.4	96.8

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Male

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 3	9.30 ± 0.72 (10)	8.92 ± 0.85 (10)	7.85 ± 0.49 (9)	8.58 ± 0.61 (10)
Percent of Control			95.9	84.4	92.3
Monocytes (10 ³ /uL)	SD 3	0.33 ± 0.03 (10)	0.30 ± 0.03 (10)	0.34 ± 0.05 (9)	0.31 ± 0.03 (10)
Percent of Control			88.9	100.8	91.9
Basophils (10 ³ /uL)	SD 3	0.06 ± 0.01 (10) *	0.05 ± 0.01 (10)	0.06 ± 0.01 (9)	0.06 ± 0.00 (10)
Percent of Control			89.8	94.2	94.9
Eosinophils (10 ³ /uL)	SD 3	0.05 ± 0.01 (10)	0.06 ± 0.01 (10)	0.05 ± 0.01 (9)	0.05 ± 0.01 (10)
Percent of Control			115.7	98.0	103.9

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Male

	Phase Day	Treatment Groups (ppm)	
		50	100
Hematocrit (%)	SD 3	44.2 ± 0.9 (10)	46.0 ± 0.7 (10)
Percent of Control		94.3	98.1
Manual Hematocrit (%)	SD 3	44.7 ± 0.9 (10)	46.1 ± 0.6 (10)
Percent of Control		95.8	98.8
Hemoglobin (g/dL)	SD 3	13.3 ± 0.2 (10)	13.9 ± 0.2 (10)
Percent of Control		96.3	100.7
Erythrocytes (10 ⁶ /uL)	SD 3	6.76 ± 0.19 (10)	7.11 ± 0.07 (10)
Percent of Control		95.1	100.1
Reticulocytes (10 ³ /uL)	SD 3	632.7 ± 25.3 (10)	612.6 ± 22.6 (10)
Percent of Control		101.1	97.9
Mean Cell Volume (fL)	SD 3	65.6 ± 0.9 (10)	64.6 ± 0.7 (10)
Percent of Control		99.5	98.0
Mean Cell Hemoglobin (pg)	SD 3	19.8 ± 0.4 (10)	19.6 ± 0.2 (10)
Percent of Control		101.6	100.6
Mean Cell Hemoglobin Concentration (g/dL)	SD 3	30.2 ± 0.2 (10) *	30.3 ± 0.2 (10) *
Percent of Control		102.2	102.6
Platelets (10 ³ /uL)	SD 3	933 ± 45 (10)	1014 ± 65 (10)
Percent of Control		104.1	113.1
White Blood Cells (10 ³ /uL)	SD 3	8.43 ± 0.32 (10) *	9.40 ± 0.84 (10)
Percent of Control		77.7	86.6
Neutrophils (10 ³ /uL)	SD 3	0.71 ± 0.05 (10) *	1.09 ± 0.12 (10)
Percent of Control		63.6	98.3

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	Phase Day	Treatment Groups (ppm)	
		50	100
Total Lymphocytes (10 ³ /uL)	SD 3	7.39 ± 0.31 (10)	7.94 ± 0.80 (10)
Percent of Control		79.5	85.4
Monocytes (10 ³ /uL)	SD 3	0.25 ± 0.02 (10)	0.27 ± 0.03 (10)
Percent of Control		75.1	79.3
Basophils (10 ³ /uL)	SD 3	0.04 ± 0.00 (10)	0.05 ± 0.00 (10)
Percent of Control		66.1	78.0
Eosinophils (10 ³ /uL)	SD 3	0.04 ± 0.00 (10)	0.06 ± 0.01 (10)
Percent of Control		84.3	109.8

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	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 3	46.6 ± 0.7 (10)	45.5 ± 0.7 (10)	45.4 ± 0.7 (10)	46.5 ± 0.4 (10)
Percent of Control			97.6	97.4	99.8
Manual Hematocrit (%)	SD 3	46.5 ± 0.7 (10)	45.5 ± 0.8 (10)	45.7 ± 0.7 (10)	46.2 ± 0.6 (10)
Percent of Control			97.8	98.3	99.4
Hemoglobin (g/dL)	SD 3	14.0 ± 0.2 (10)	13.8 ± 0.2 (10)	13.8 ± 0.2 (10)	14.2 ± 0.2 (10)
Percent of Control			99.2	99.1	101.6
Erythrocytes (10 ⁶ /uL)	SD 3	7.26 ± 0.11 (10)	7.20 ± 0.09 (10)	7.21 ± 0.10 (10)	7.38 ± 0.12 (10)
Percent of Control			99.1	99.3	101.7
Reticulocytes (10 ³ /uL)	SD 3	414.9 ± 32.2 (10)	391.8 ± 21.2 (10)	398.0 ± 23.1 (10)	423.5 ± 30.2 (10)
Percent of Control			94.4	95.9	102.1
Mean Cell Volume (fL)	SD 3	64.1 ± 0.7 (10) *	63.2 ± 0.5 (10)	62.9 ± 0.5 (10)	63.1 ± 0.7 (10)
Percent of Control			98.5	98.1	98.4
Mean Cell Hemoglobin (pg)	SD 3	19.2 ± 0.2 (10)	19.2 ± 0.2 (10)	19.2 ± 0.2 (10)	19.2 ± 0.2 (10)
Percent of Control			100.1	99.8	99.9
Mean Cell Hemoglobin Concentration (g/dL)	SD 3	30.0 ± 0.2 (10)	30.5 ± 0.2 (10)	30.5 ± 0.2 (10)	30.5 ± 0.2 (10)
Percent of Control			101.7	101.8	101.6
Platelets (10 ³ /uL)	SD 3	960 ± 65 (10)	926 ± 48 (10)	910 ± 35 (10)	899 ± 43 (10)
Percent of Control			96.5	94.8	93.7
White Blood Cells (10 ³ /uL)	SD 3	6.65 ± 0.17 (10)	6.91 ± 0.44 (10)	7.91 ± 0.31 (10)	6.88 ± 0.55 (10)
Percent of Control			104.0	118.9	103.6
Neutrophils (10 ³ /uL)	SD 3	0.68 ± 0.05 (10)	0.62 ± 0.06 (10)	0.70 ± 0.08 (10)	0.66 ± 0.08 (10)
Percent of Control			90.8	102.0	97.2

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	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 3	5.64 ± 0.19 (10)	5.99 ± 0.37 (10)	6.85 ± 0.25 (10) *	5.90 ± 0.50 (10)
Percent of Control			106.2	121.5	104.6
Monocytes (10 ³ /uL)	SD 3	0.21 ± 0.02 (10)	0.19 ± 0.02 (10)	0.24 ± 0.03 (10)	0.21 ± 0.03 (10)
Percent of Control			91.8	116.3	100.5
Basophils (10 ³ /uL)	SD 3	0.06 ± 0.00 (10)	0.06 ± 0.01 (10)	0.06 ± 0.00 (10)	0.06 ± 0.02 (10)
Percent of Control			94.9	93.2	101.7
Eosinophils (10 ³ /uL)	SD 3	0.06 ± 0.01 (10)	0.05 ± 0.01 (10)	0.06 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control			86.9	98.4	82.0

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Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Hematocrit (%)	SD 3	45.0 ± 0.7 (10)	45.8 ± 0.6 (10)
Percent of Control		96.5	98.3
Manual Hematocrit (%)	SD 3	45.1 ± 0.6 (10)	45.9 ± 0.6 (10)
Percent of Control		97.0	98.7
Hemoglobin (g/dL)	SD 3	13.9 ± 0.2 (10)	14.0 ± 0.2 (10)
Percent of Control		99.6	100.0
Erythrocytes (10 ⁶ /uL)	SD 3	7.18 ± 0.13 (10)	7.35 ± 0.09 (10)
Percent of Control		98.8	101.1
Reticulocytes (10 ³ /uL)	SD 3	380.2 ± 29.8 (10)	470.9 ± 24.3 (10)
Percent of Control		91.6	113.5
Mean Cell Volume (fL)	SD 3	62.7 ± 0.4 (10)	62.3 ± 0.3 (10)
Percent of Control		97.7	97.1
Mean Cell Hemoglobin (pg)	SD 3	19.4 ± 0.3 (10)	19.0 ± 0.2 (10)
Percent of Control		100.8	98.6
Mean Cell Hemoglobin Concentration (g/dL)	SD 3	30.9 ± 0.3 (10) *	30.5 ± 0.3 (10)
Percent of Control		103.1	101.7
Platelets (10 ³ /uL)	SD 3	913 ± 39 (10)	1011 ± 47 (10)
Percent of Control		95.1	105.3
White Blood Cells (10 ³ /uL)	SD 3	8.12 ± 0.68 (10)	7.03 ± 0.32 (10)
Percent of Control		122.2	105.8
Neutrophils (10 ³ /uL)	SD 3	0.74 ± 0.04 (10)	0.62 ± 0.07 (10)
Percent of Control		108.8	90.2

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Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Total Lymphocytes ($10^3/\mu\text{L}$)	SD 3	6.99 ± 0.64 (10)	6.11 ± 0.26 (10)
Percent of Control		123.9	108.4
Monocytes ($10^3/\mu\text{L}$)	SD 3	0.24 ± 0.03 (10)	0.20 ± 0.03 (10)
Percent of Control		116.8	95.7
Basophils ($10^3/\mu\text{L}$)	SD 3	0.07 ± 0.02 (10)	0.06 ± 0.00 (10)
Percent of Control		115.3	93.2
Eosinophils ($10^3/\mu\text{L}$)	SD 3	0.08 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control		126.2	86.9

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Male

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 23	49.8 ± 1.1 (10)	50.5 ± 0.6 (10)	48.9 ± 0.7 (10)	50.0 ± 0.7 (10)
Percent of Control			101.5	98.2	100.3
Manual Hematocrit (%)	SD 23	49.1 ± 1.0 (10)	49.7 ± 0.7 (10)	48.5 ± 0.8 (10)	49.5 ± 0.7 (10)
Percent of Control			101.3	98.8	100.8
Hemoglobin (g/dL)	SD 23	15.3 ± 0.3 (10)	15.4 ± 0.2 (10)	15.2 ± 0.2 (10)	15.2 ± 0.2 (10)
Percent of Control			101.0	99.7	99.8
Erythrocytes (10 ⁶ /uL)	SD 23	7.82 ± 0.14 (10)	7.97 ± 0.09 (10)	7.69 ± 0.11 (10)	7.89 ± 0.14 (10)
Percent of Control			101.9	98.4	100.9
Reticulocytes (10 ³ /uL)	SD 23	292.9 ± 14.0 (10) **	287.1 ± 10.6 (10)	280.8 ± 12.7 (10)	302.6 ± 17.1 (10)
Percent of Control			98.0	95.9	103.3
Mean Cell Volume (fL)	SD 23	63.7 ± 0.5 (10)	63.4 ± 0.4 (10)	63.5 ± 0.3 (10)	63.4 ± 0.6 (10)
Percent of Control			99.6	99.7	99.6
Mean Cell Hemoglobin (pg)	SD 23	19.5 ± 0.1 (10)	19.4 ± 0.2 (10)	19.8 ± 0.2 (10)	19.3 ± 0.2 (10)
Percent of Control			99.1	101.3	99.0
Mean Cell Hemoglobin Concentration (g/dL)	SD 23	30.7 ± 0.2 (10)	30.5 ± 0.2 (10)	31.2 ± 0.3 (10)	30.5 ± 0.1 (10)
Percent of Control			99.4	101.6	99.4
Platelets (10 ³ /uL)	SD 23	881 ± 35 (10)	890 ± 41 (10)	850 ± 45 (10)	859 ± 29 (10)
Percent of Control			101.0	96.4	97.5
White Blood Cells (10 ³ /uL)	SD 23	10.00 ± 0.51 (10)	9.18 ± 0.65 (10)	8.90 ± 0.27 (10)	9.09 ± 0.39 (10)
Percent of Control			91.8	89.0	90.9
Neutrophils (10 ³ /uL)	SD 23	0.85 ± 0.06 (10) **	0.90 ± 0.12 (10)	0.75 ± 0.09 (10)	0.89 ± 0.09 (10)
Percent of Control			106.4	88.4	105.2

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	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 23	8.81 ± 0.49 (10)	8.00 ± 0.70 (10)	7.83 ± 0.26 (10)	7.88 ± 0.40 (10)
Percent of Control			90.8	88.9	89.4
Monocytes (10 ³ /uL)	SD 23	0.24 ± 0.01 (10)	0.19 ± 0.02 (10)	0.22 ± 0.01 (10)	0.22 ± 0.02 (10)
Percent of Control			78.2	91.4	91.4
Basophils (10 ³ /uL)	SD 23	0.04 ± 0.00 (10)	0.04 ± 0.00 (10)	0.04 ± 0.00 (10)	0.04 ± 0.00 (10)
Percent of Control			87.8	100.0	90.2
Eosinophils (10 ³ /uL)	SD 23	0.06 ± 0.01 (10) *	0.05 ± 0.01 (10)	0.06 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control			82.1	101.8	96.4

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		50	100
Hematocrit (%)	SD 23	49.7 ± 0.6 (10)	50.0 ± 1.5 (10)
Percent of Control		99.9	100.4
Manual Hematocrit (%)	SD 23	48.9 ± 0.6 (10)	49.7 ± 1.5 (10)
Percent of Control		99.6	101.2
Hemoglobin (g/dL)	SD 23	15.4 ± 0.2 (10)	15.5 ± 0.4 (10)
Percent of Control		100.5	101.2
Erythrocytes (10 ⁶ /uL)	SD 23	7.74 ± 0.18 (10)	7.89 ± 0.20 (10)
Percent of Control		99.1	100.9
Reticulocytes (10 ³ /uL)	SD 23	279.5 ± 14.1 (10)	398.5 ± 16.7 (10) **
Percent of Control		95.4	136.0
Mean Cell Volume (fL)	SD 23	64.4 ± 0.9 (10)	63.4 ± 0.5 (10)
Percent of Control		101.1	99.5
Mean Cell Hemoglobin (pg)	SD 23	19.9 ± 0.3 (10)	19.6 ± 0.1 (10)
Percent of Control		101.8	100.3
Mean Cell Hemoglobin Concentration (g/dL)	SD 23	30.9 ± 0.2 (10)	30.9 ± 0.1 (10)
Percent of Control		100.7	100.8
Platelets (10 ³ /uL)	SD 23	832 ± 29 (10)	886 ± 36 (10)
Percent of Control		94.4	100.5
White Blood Cells (10 ³ /uL)	SD 23	9.76 ± 0.45 (10)	9.78 ± 0.94 (10)
Percent of Control		97.6	97.8
Neutrophils (10 ³ /uL)	SD 23	1.31 ± 0.17 (10)	2.06 ± 0.64 (10) **
Percent of Control		154.8	243.3

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		50	100
Total Lymphocytes (10 ³ /uL)	SD 23	8.07 ± 0.31 (10)	7.29 ± 0.76 (10)
Percent of Control		91.6	82.7
Monocytes (10 ³ /uL)	SD 23	0.28 ± 0.03 (10)	0.28 ± 0.03 (10)
Percent of Control		113.6	116.5
Basophils (10 ³ /uL)	SD 23	0.04 ± 0.00 (10)	0.04 ± 0.01 (10)
Percent of Control		104.9	90.2
Eosinophils (10 ³ /uL)	SD 23	0.06 ± 0.00 (10)	0.12 ± 0.04 (10)
Percent of Control		108.9	212.5

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Female

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 23	48.3 ± 0.6 (10)	49.3 ± 0.8 (10)	47.7 ± 0.5 (10)	48.9 ± 0.5 (10)
Percent of Control			102.1	98.9	101.3
Manual Hematocrit (%)	SD 23	47.4 ± 0.5 (10)	48.7 ± 0.8 (10)	47.2 ± 0.7 (10)	48.2 ± 0.4 (10)
Percent of Control			102.7	99.5	101.7
Hemoglobin (g/dL)	SD 23	15.2 ± 0.2 (10)	15.5 ± 0.2 (10)	15.0 ± 0.2 (10)	15.4 ± 0.1 (10)
Percent of Control			102.3	99.3	101.5
Erythrocytes (10 ⁶ /uL)	SD 23	7.77 ± 0.09 (10)	7.97 ± 0.11 (10)	7.75 ± 0.11 (10)	7.92 ± 0.09 (10)
Percent of Control			102.6	99.8	101.9
Reticulocytes (10 ³ /uL)	SD 23	182.2 ± 12.8 (10) *	192.1 ± 12.4 (10)	200.9 ± 12.3 (10)	204.9 ± 9.9 (10)
Percent of Control			105.4	110.3	112.5
Mean Cell Volume (fL)	SD 23	62.2 ± 0.6 (10)	61.8 ± 0.3 (10)	61.6 ± 0.5 (10)	61.8 ± 0.4 (10)
Percent of Control			99.5	99.1	99.4
Mean Cell Hemoglobin (pg)	SD 23	19.5 ± 0.2 (10)	19.5 ± 0.1 (10)	19.4 ± 0.2 (10)	19.4 ± 0.1 (10)
Percent of Control			99.9	99.4	99.7
Mean Cell Hemoglobin Concentration (g/dL)	SD 23	31.4 ± 0.2 (10)	31.5 ± 0.2 (10)	31.5 ± 0.2 (10)	31.5 ± 0.2 (10)
Percent of Control			100.4	100.3	100.2
Platelets (10 ³ /uL)	SD 23	878 ± 36 (10)	812 ± 35 (10)	831 ± 34 (10)	872 ± 37 (10)
Percent of Control			92.5	94.7	99.3
White Blood Cells (10 ³ /uL)	SD 23	5.69 ± 0.32 (10) **	6.91 ± 0.59 (10)	7.30 ± 0.41 (10)	6.09 ± 0.24 (10)
Percent of Control			121.5	128.4	107.1
Neutrophils (10 ³ /uL)	SD 23	0.70 ± 0.07 (10) **	0.67 ± 0.05 (10)	0.51 ± 0.03 (10)	0.63 ± 0.05 (10)
Percent of Control			94.9	72.3	89.2

Study Number: C08010-01
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 23	4.74 ± 0.24 (10) **	5.95 ± 0.54 (10)	6.53 ± 0.39 (10) **	5.25 ± 0.24 (10) *
Percent of Control			125.4	137.6	110.6
Monocytes (10 ³ /uL)	SD 23	0.14 ± 0.01 (10) **	0.16 ± 0.01 (10)	0.17 ± 0.01 (10)	0.15 ± 0.01 (10)
Percent of Control			110.5	120.3	101.4
Basophils (10 ³ /uL)	SD 23	0.02 ± 0.00 (10) *	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)	0.02 ± 0.00 (10)
Percent of Control			127.3	150.0	104.5
Eosinophils (10 ³ /uL)	SD 23	0.07 ± 0.01 (10)	0.11 ± 0.05 (10)	0.06 ± 0.01 (10)	0.05 ± 0.01 (10)
Percent of Control			143.2	79.7	66.2

Study Number: C08010-01
Test Type: TOX
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Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
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CAS Number: 600-14-6

Date Report Requested: 11/07/2019
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Hematocrit (%)	SD 23	48.8 ± 0.4 (9)	50.7 ± 1.0 (10)
Percent of Control		101.0	105.0
Manual Hematocrit (%)	SD 23	47.7 ± 0.3 (9)	49.5 ± 0.7 (10)
Percent of Control		100.7	104.3
Hemoglobin (g/dL)	SD 23	15.3 ± 0.1 (9)	15.7 ± 0.2 (10)
Percent of Control		100.8	103.6
Erythrocytes (10 ⁶ /uL)	SD 23	7.83 ± 0.11 (9)	8.19 ± 0.14 (10)
Percent of Control		100.9	105.4
Reticulocytes (10 ³ /uL)	SD 23	202.9 ± 14.5 (9)	251.4 ± 27.2 (10)
Percent of Control		111.4	138.0
Mean Cell Volume (fL)	SD 23	62.3 ± 0.4 (9)	61.9 ± 0.2 (10)
Percent of Control		100.2	99.5
Mean Cell Hemoglobin (pg)	SD 23	19.5 ± 0.2 (9)	19.2 ± 0.1 (10)
Percent of Control		100.3	98.3
Mean Cell Hemoglobin Concentration (g/dL)	SD 23	31.4 ± 0.2 (9)	31.0 ± 0.2 (10)
Percent of Control		99.9	98.6
Platelets (10 ³ /uL)	SD 23	885 ± 44 (9)	952 ± 38 (10)
Percent of Control		100.8	108.4
White Blood Cells (10 ³ /uL)	SD 23	8.59 ± 0.50 (9) **	9.02 ± 0.64 (10) **
Percent of Control		151.0	158.7
Neutrophils (10 ³ /uL)	SD 23	1.29 ± 0.34 (9)	1.79 ± 0.27 (10) *
Percent of Control		183.9	254.0

Study Number: C08010-01
Test Type: TOX
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PA43: Hematology Summary
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Total Lymphocytes (10 ³ /uL)	SD 23	6.97 ± 0.41 (9) **	6.85 ± 0.51 (10) **
Percent of Control		146.9	144.4
Monocytes (10 ³ /uL)	SD 23	0.22 ± 0.03 (9) **	0.25 ± 0.04 (10) **
Percent of Control		150.7	175.5
Basophils (10 ³ /uL)	SD 23	0.04 ± 0.00 (9) *	0.04 ± 0.00 (10)
Percent of Control		166.7	163.6
Eosinophils (10 ³ /uL)	SD 23	0.08 ± 0.01 (9)	0.10 ± 0.03 (10)
Percent of Control		103.6	135.1

Study Number: C08010-01
Test Type: TOX
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PA43: Hematology Summary
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CAS Number: 600-14-6

Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

Male

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 93	49.2 ± 0.5 (10) **	50.2 ± 0.4 (10)	48.4 ± 0.8 (10)	49.9 ± 0.9 (10)
Percent of Control			102.1	98.4	101.4
Manual Hematocrit (%)	SD 93	48.3 ± 0.7 (10) *	49.3 ± 0.4 (10)	47.9 ± 0.7 (10)	49.0 ± 0.6 (10)
Percent of Control			102.0	99.2	101.4
Hemoglobin (g/dL)	SD 93	15.6 ± 0.2 (10) **	15.9 ± 0.1 (10)	15.5 ± 0.2 (10)	15.7 ± 0.2 (10)
Percent of Control			101.6	99.4	100.7
Erythrocytes (10 ⁶ /uL)	SD 93	8.64 ± 0.14 (10) *	9.00 ± 0.11 (10)	8.47 ± 0.14 (10)	8.80 ± 0.17 (10)
Percent of Control			104.1	98.0	101.9
Reticulocytes (10 ³ /uL)	SD 93	201.7 ± 5.5 (10)	203.6 ± 3.4 (10)	202.4 ± 6.2 (10)	191.4 ± 7.6 (10)
Percent of Control			100.9	100.3	94.9
Mean Cell Volume (fL)	SD 93	57.0 ± 0.5 (10)	55.8 ± 0.4 (10)	57.2 ± 0.6 (10)	56.7 ± 0.7 (10)
Percent of Control			97.9	100.3	99.5
Mean Cell Hemoglobin (pg)	SD 93	18.2 ± 0.3 (10)	17.7 ± 0.2 (10)	18.4 ± 0.3 (10)	17.9 ± 0.2 (10)
Percent of Control			97.4	101.2	98.5
Mean Cell Hemoglobin Concentration (g/dL)	SD 93	31.8 ± 0.4 (10)	31.7 ± 0.2 (10)	32.1 ± 0.3 (10)	31.6 ± 0.3 (10)
Percent of Control			99.6	101.0	99.2
Platelets (10 ³ /uL)	SD 93	650 ± 28 (10) **	663 ± 24 (10)	662 ± 31 (10)	634 ± 24 (10)
Percent of Control			101.9	101.8	97.5
White Blood Cells (10 ³ /uL)	SD 93	8.82 ± 0.69 (10)	8.50 ± 0.58 (10)	7.85 ± 0.56 (10)	7.66 ± 0.68 (10)
Percent of Control			96.4	89.0	86.8
Neutrophils (10 ³ /uL)	SD 93	1.25 ± 0.07 (10) **	1.31 ± 0.11 (10)	1.12 ± 0.06 (10)	1.09 ± 0.10 (10)
Percent of Control			104.6	89.7	87.2

Study Number: C08010-01
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

Male

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 93	7.31 ± 0.62 (10) **	6.90 ± 0.54 (10)	6.50 ± 0.51 (10)	6.33 ± 0.61 (10)
Percent of Control			94.4	89.0	86.6
Monocytes (10 ³ /uL)	SD 93	0.16 ± 0.01 (10)	0.17 ± 0.01 (10)	0.13 ± 0.01 (10)	0.15 ± 0.02 (10)
Percent of Control			104.4	82.4	95.6
Basophils (10 ³ /uL)	SD 93	0.03 ± 0.00 (10)	0.04 ± 0.00 (10)	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)
Percent of Control			130.0	110.0	90.0
Eosinophils (10 ³ /uL)	SD 93	0.08 ± 0.01 (10)	0.10 ± 0.01 (10)	0.06 ± 0.00 (10)	0.06 ± 0.00 (10)
Percent of Control			121.5	79.7	81.0

Study Number: C08010-01
Test Type: TOX
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Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
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Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

Male

	Phase Day	Treatment Groups (ppm)	
		50	100
Hematocrit (%)	SD 93	51.3 ± 0.8 (10)	52.4 ± 0.5 (10) **
Percent of Control		104.2	106.6
Manual Hematocrit (%)	SD 93	50.1 ± 0.9 (10)	50.5 ± 0.6 (10)
Percent of Control		103.7	104.6
Hemoglobin (g/dL)	SD 93	16.2 ± 0.3 (10)	16.5 ± 0.2 (10) **
Percent of Control		103.4	105.7
Erythrocytes (10 ⁶ /uL)	SD 93	9.02 ± 0.11 (10)	9.14 ± 0.13 (10)
Percent of Control		104.4	105.8
Reticulocytes (10 ³ /uL)	SD 93	205.9 ± 9.9 (10)	220.8 ± 12.8 (10)
Percent of Control		102.1	109.5
Mean Cell Volume (fL)	SD 93	56.8 ± 0.5 (10)	57.5 ± 0.6 (10)
Percent of Control		99.6	100.8
Mean Cell Hemoglobin (pg)	SD 93	17.9 ± 0.2 (10)	18.1 ± 0.2 (10)
Percent of Control		98.8	99.6
Mean Cell Hemoglobin Concentration (g/dL)	SD 93	31.6 ± 0.2 (10)	31.5 ± 0.1 (10)
Percent of Control		99.2	99.0
Platelets (10 ³ /uL)	SD 93	649 ± 25 (10)	565 ± 26 (10) *
Percent of Control		99.8	86.9
White Blood Cells (10 ³ /uL)	SD 93	8.88 ± 0.83 (10)	7.36 ± 0.41 (10)
Percent of Control		100.7	83.4
Neutrophils (10 ³ /uL)	SD 93	1.95 ± 0.28 (10) *	2.08 ± 0.31 (10) *
Percent of Control		156.0	166.2

Study Number: C08010-01
Test Type: TOX
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Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
Time Report Requested: 07:09:27
Lab: NTP

Male

	Phase Day	Treatment Groups (ppm)	
		50	100
Total Lymphocytes (10 ³ /uL)	SD 93	6.61 ± 0.56 (10)	5.04 ± 0.28 (10) **
Percent of Control		90.5	68.9
Monocytes (10 ³ /uL)	SD 93	0.21 ± 0.03 (10)	0.13 ± 0.01 (10)
Percent of Control		130.2	83.6
Basophils (10 ³ /uL)	SD 93	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)
Percent of Control		106.7	90.0
Eosinophils (10 ³ /uL)	SD 93	0.09 ± 0.02 (10)	0.08 ± 0.01 (10)
Percent of Control		107.6	106.3

Study Number: C08010-01
Test Type: TOX
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Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Hematocrit (%)	SD 94	48.9 ± 0.9 (10)	49.2 ± 0.5 (10)	47.6 ± 0.8 (10)	48.3 ± 0.6 (10)
Percent of Control			100.5	97.3	98.7
Manual Hematocrit (%)	SD 94	48.0 ± 0.7 (10)	48.3 ± 0.5 (10)	47.5 ± 0.6 (10)	47.8 ± 0.4 (10)
Percent of Control			100.5	98.9	99.5
Hemoglobin (g/dL)	SD 94	15.5 ± 0.2 (10)	15.6 ± 0.1 (10)	15.2 ± 0.2 (10)	15.3 ± 0.1 (10)
Percent of Control			100.8	98.3	99.2
Erythrocytes (10 ⁶ /uL)	SD 94	8.37 ± 0.15 (10)	8.46 ± 0.12 (10)	8.18 ± 0.15 (10)	8.23 ± 0.13 (10)
Percent of Control			101.1	97.7	98.3
Reticulocytes (10 ³ /uL)	SD 94	232.2 ± 5.6 (10) *	240.3 ± 10.7 (10)	229.4 ± 14.9 (10)	239.4 ± 9.8 (10)
Percent of Control			103.4	98.8	103.1
Mean Cell Volume (fL)	SD 94	58.4 ± 0.5 (10)	58.1 ± 0.4 (10)	58.2 ± 0.5 (10)	58.6 ± 0.5 (10)
Percent of Control			99.5	99.6	100.3
Mean Cell Hemoglobin (pg)	SD 94	18.5 ± 0.2 (10)	18.5 ± 0.2 (10)	18.6 ± 0.2 (10)	18.7 ± 0.2 (10)
Percent of Control			99.8	100.5	100.8
Mean Cell Hemoglobin Concentration (g/dL)	SD 94	31.7 ± 0.3 (10)	31.7 ± 0.2 (10)	32.0 ± 0.3 (10)	31.8 ± 0.2 (10)
Percent of Control			100.3	101.0	100.4
Platelets (10 ³ /uL)	SD 94	579 ± 28 (10)	622 ± 32 (10)	625 ± 35 (10)	596 ± 44 (10)
Percent of Control			107.5	108.0	103.0
White Blood Cells (10 ³ /uL)	SD 94	6.14 ± 0.60 (10)	6.76 ± 0.63 (10)	7.26 ± 0.45 (10)	5.70 ± 0.37 (10)
Percent of Control			110.1	118.3	92.9
Neutrophils (10 ³ /uL)	SD 94	1.00 ± 0.08 (10) **	1.12 ± 0.07 (10)	1.20 ± 0.05 (10)	1.09 ± 0.12 (10)
Percent of Control			112.3	120.3	109.0

Study Number: C08010-01
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
Test Compound: 2,3-Pentanedione
CAS Number: 600-14-6

Date Report Requested: 11/07/2019
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)			
		0	6.25	12.5	25
Total Lymphocytes (10 ³ /uL)	SD 94	4.94 ± 0.55 (10) *	5.40 ± 0.57 (10)	5.83 ± 0.42 (10)	4.42 ± 0.34 (10)
Percent of Control			109.4	118.1	89.5
Monocytes (10 ³ /uL)	SD 94	0.12 ± 0.01 (10) *	0.13 ± 0.02 (10)	0.13 ± 0.01 (10)	0.10 ± 0.01 (10)
Percent of Control			114.7	113.8	87.9
Basophils (10 ³ /uL)	SD 94	0.03 ± 0.00 (10)	0.02 ± 0.00 (10)	0.02 ± 0.00 (10)	0.03 ± 0.00 (10)
Percent of Control			88.5	88.5	103.8
Eosinophils (10 ³ /uL)	SD 94	0.06 ± 0.01 (10)	0.08 ± 0.01 (10)	0.07 ± 0.01 (10)	0.07 ± 0.01 (10)
Percent of Control			127.9	114.8	109.8

Study Number: C08010-01
Test Type: TOX
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PA43: Hematology Summary
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Date Report Requested: 11/07/2019
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Hematocrit (%)	SD 94	49.3 ± 0.8 (10)	50.2 ± 0.4 (10)
Percent of Control		100.8	102.6
Manual Hematocrit (%)	SD 94	48.5 ± 0.6 (10)	49.3 ± 0.5 (10)
Percent of Control		100.9	102.6
Hemoglobin (g/dL)	SD 94	15.6 ± 0.1 (10)	16.0 ± 0.1 (10)
Percent of Control		101.0	103.1
Erythrocytes (10 ⁶ /uL)	SD 94	8.50 ± 0.11 (10)	8.52 ± 0.08 (10)
Percent of Control		101.5	101.8
Reticulocytes (10 ³ /uL)	SD 94	268.8 ± 15.4 (10)	260.9 ± 18.8 (10)
Percent of Control		115.8	112.3
Mean Cell Volume (fL)	SD 94	58.0 ± 0.3 (10)	58.9 ± 0.5 (10)
Percent of Control		99.3	100.7
Mean Cell Hemoglobin (pg)	SD 94	18.4 ± 0.1 (10)	18.7 ± 0.1 (10)
Percent of Control		99.4	101.2
Mean Cell Hemoglobin Concentration (g/dL)	SD 94	31.7 ± 0.3 (10)	31.8 ± 0.2 (10)
Percent of Control		100.1	100.5
Platelets (10 ³ /uL)	SD 94	652 ± 56 (10)	637 ± 32 (10)
Percent of Control		112.6	110.1
White Blood Cells (10 ³ /uL)	SD 94	6.74 ± 0.84 (10)	6.77 ± 0.49 (10)
Percent of Control		109.7	110.3
Neutrophils (10 ³ /uL)	SD 94	1.83 ± 0.21 (10) **	2.42 ± 0.20 (10) **
Percent of Control		182.3	241.5

Study Number: C08010-01
Test Type: TOX
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Species/Strain: Rat/Wistar Han

PA43: Hematology Summary
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Date Report Requested: 11/07/2019
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Lab: NTP

Female

	Phase Day	Treatment Groups (ppm)	
		50	100
Total Lymphocytes (10 ³ /uL)	SD 94	4.67 ± 0.70 (10)	4.02 ± 0.31 (10)
Percent of Control		94.6	81.4
Monocytes (10 ³ /uL)	SD 94	0.15 ± 0.02 (10)	0.20 ± 0.03 (10) *
Percent of Control		131.9	170.7
Basophils (10 ³ /uL)	SD 94	0.03 ± 0.00 (10)	0.03 ± 0.00 (10)
Percent of Control		103.8	100.0
Eosinophils (10 ³ /uL)	SD 94	0.06 ± 0.01 (10)	0.11 ± 0.02 (10)
Percent of Control		104.9	175.4

Study Number: C08010-01
Test Type: TOX
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LEGEND

Values given as mean \pm SEM (N) with Percent of Control calculated by (dosed group mean / control group mean) x 100

SD – Study Day

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (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 ****