

Study Number: C11054B-01
Test Type: TOX
Route: Dosing in Water
Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)
Test Compound: Sulfolane
CAS Number: 126-33-0

Date Report Requested: 01/28/2022
Time Report Requested: 10:18:27
Lab: Battelle

Study Number: C11054B-01
Study Sex: Both
PWG Approval Date: See web page for date of PWG Approval
Version: v1.3.6

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Alopecia Dorsum; Bilateral	0 / 50	1 / 50 SD 588	0 / 50	0 / 50	0 / 50
SD	Alopecia	1 / 50 SD 0	0 / 50	0 / 50	0 / 50	0 / 50
SD	Ataxia Mild	0 / 50	1 / 50 SD 445	0 / 50	0 / 50	1 / 50 SD 555
SD	Ataxia Moderate	0 / 50	0 / 50	2 / 50 SD 606	0 / 50	0 / 50
SD	Ataxia Severe	1 / 50 SD 606	0 / 50	0 / 50	0 / 50	0 / 50
SD	Bizarre Behavior, Writhing	0 / 50	0 / 50	0 / 50	1 / 50 SD 412	0 / 50
SD	Breathing, gasping	0 / 50	2 / 50 SD 476	0 / 50	1 / 50 SD 477	1 / 50 SD 618
SD	Breathing, labored	6 / 50 SD 469	1 / 50 SD 448	5 / 50 SD 427	7 / 50 SD 412	6 / 50 SD 382
SD	Breathing, rapid	1 / 50 SD 616	5 / 50 SD 402	1 / 50 SD 483	2 / 50 SD 547	2 / 50 SD 385
SD	Breathing, shallow	0 / 50	1 / 50 SD 549	1 / 50 SD 517	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Breathing, slow	1 / 50 SD 572	0 / 50	0 / 50	0 / 50	0 / 50
SD	Breathing, wheezing	0 / 50	1 / 50 SD 364	0 / 50	0 / 50	0 / 50
SD	Bulging Eye; Right	1 / 50 SD 549	0 / 50	0 / 50	0 / 50	0 / 50
SD	Coat Ruffled	16 / 50 SD 322	15 / 50 SD 346	15 / 50 SD 165	14 / 50 SD 316	15 / 50 SD 224
SD	Coat Soiled Anus; Bilateral	0 / 50	1 / 50 SD 448	0 / 50	0 / 50	1 / 50 SD 591
SD	Coat Soiled Dorsum; Bilateral	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 440
SD	Coat Soiled Head; Bilateral	0 / 50	1 / 50 SD 476	0 / 50	0 / 50	0 / 50
SD	Coat Soiled Multiple Sites (>3); Bilateral	0 / 50	1 / 50 SD 560	0 / 50	0 / 50	0 / 50
SD	Cold To Touch	3 / 50 SD 469	0 / 50	5 / 50 SD 483	3 / 50 SD 520	2 / 50 SD 476
SD	Damaged Tail	1 / 50 SD 637	0 / 50	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Discharge Anus; Brown	1 / 50 SD 578	0 / 50	0 / 50	0 / 50	0 / 50
SD	Discharge Anus; Red	0 / 50	0 / 50	1 / 50 SD 557	0 / 50	0 / 50
SD	Discharge Eye; Bilateral	0 / 50	1 / 50 SD 364	0 / 50	0 / 50	0 / 50
SD	Discharge Eye; Bilateral, Red	6 / 50 SD 506	6 / 50 SD 364	4 / 50 SD 430	5 / 50 SD 392	5 / 50 SD 420
SD	Discharge Eye; Left	0 / 50	1 / 50 SD 364	0 / 50	0 / 50	0 / 50
SD	Discharge Eye; Left, Red	7 / 50 SD 336	1 / 50 SD 308	5 / 50 SD 168	4 / 50 SD 224	7 / 50 SD 308
SD	Discharge Eye; Red	6 / 50 SD 0	1 / 50 SD 402	5 / 50 SD 0	1 / 50 SD 378	5 / 50 SD 28
SD	Discharge Eye; Red, Right	4 / 50 SD 308	1 / 50 SD 308	0 / 50	4 / 50 SD 336	2 / 50 SD 420
SD	Discharge Nose/Snout; Bilateral, Red	0 / 50	4 / 50 SD 408	3 / 50 SD 448	1 / 50 SD 493	4 / 50 SD 485
SD	Discharge Nose/Snout; Brown	0 / 50	0 / 50	0 / 50	1 / 50 SD 412	0 / 50

Study Number: C11054B-01**Test Type:** TOX**Route:** Dosing in Water**Species/Strain:** Rat/Harlan Sprague Dawley**I05: Clinical Observations Summary (Chronic Animals)****Test Compound:** Sulfolane**CAS Number:** 126-33-0**Date Report Requested:** 01/28/2022**Time Report Requested:** 10:18:27**Lab:** Battelle**F1 Male: F1 Core Animals**

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Discharge Nose/Snout; Red	18 / 50 SD 28	19 / 50 SD 0	22 / 50 SD 28	15 / 50 SD 140	18 / 50 SD 140
SD	Discharge Urogenital; Brown	0 / 50	0 / 50	0 / 50	1 / 50 SD 445	0 / 50
SD	Discolored Abdomen; Bilateral, Green	1 / 50 SD 502	0 / 50	0 / 50	0 / 50	0 / 50
SD	Distended Abdomen	0 / 50	1 / 50 SD 588	1 / 50 SD 616	2 / 50 SD 520	1 / 50 SD 616
SD	Eye Abnormality Bilateral	2 / 50 SD 420	1 / 50 SD 364	0 / 50	0 / 50	2 / 50 SD 476
SD	Eye Abnormality Left	0 / 50	1 / 50 SD 582	2 / 50 SD 280	1 / 50 SD 560	1 / 50 SD 364
SD	Eye Abnormality Right	2 / 50 SD 267	0 / 50	1 / 50 SD 280	1 / 50 SD 252	0 / 50
SD	Eye Shut Bilateral	0 / 50	0 / 50	0 / 50	1 / 50 SD 616	0 / 50
SD	Feces Few	0 / 50	3 / 50 SD 402	1 / 50 SD 588	0 / 50	1 / 50 SD 616
SD	Feces Liquid	1 / 50 SD 619	0 / 50	0 / 50	0 / 50	1 / 50 SD 458

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Feces None	0 / 50	1 / 50 SD 592	1 / 50 SD 517	1 / 50 SD 536	0 / 50
SD	Feces Soft	2 / 50 SD 392	0 / 50	1 / 50 SD 561	1 / 50 SD 316	1 / 50 SD 458
SD	Feces Tarry	0 / 50	0 / 50	1 / 50 SD 612	0 / 50	0 / 50
SD	Gait Abnormal	1 / 50 SD 546	2 / 50 SD 533	1 / 50 SD 560	1 / 50 SD 444	1 / 50 SD 448
SD	Head Tilt	3 / 50 SD 224	2 / 50 SD 364	1 / 50 SD 430	1 / 50 SD 224	5 / 50 SD 140
SD	Hunched	8 / 50 SD 322	9 / 50 SD 346	8 / 50 SD 507	10 / 50 SD 316	9 / 50 SD 288
SD	Kinked Tail	0 / 50	0 / 50	1 / 50 SD 112	0 / 50	0 / 50
SD	Lethargic	14 / 50 SD 322	16 / 50 SD 364	21 / 50 SD 165	15 / 50 SD 316	14 / 50 SD 326
SD	Limping Hind Limb; Moderate	1 / 50 SD 476	0 / 50	0 / 50	0 / 50	0 / 50
SD	Limping Hind Limb; Severe	1 / 50 SD 336	0 / 50	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Limping Hind Paw; Mild	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Limping Moderate	1 / 50 SD 504	0 / 50	0 / 50	0 / 50	0 / 50
SD	Limping Severe	1 / 50 SD 507	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Abdomen; 1, Bilateral, Medium (6-15mm)	0 / 50	0 / 50	1 / 50 SD 560	0 / 50	0 / 50
SD	Mass Abdomen; 1, Bilateral, Small (1-5mm)	0 / 50	1 / 50 SD 392	1 / 50 SD 532	0 / 50	0 / 50
SD	Mass Abdomen; 1, Large (>15mm)	0 / 50	1 / 50 SD 638	0 / 50	0 / 50	0 / 50
SD	Mass Abdomen; 1, Large (>15mm), Left	1 / 50 SD 588	0 / 50	0 / 50	2 / 50 SD 532	0 / 50
SD	Mass Abdomen; 1, Large (>15mm), Right	1 / 50 SD 637	0 / 50	3 / 50 SD 504	2 / 50 SD 392	1 / 50 SD 532
SD	Mass Abdomen; 1, Large (>15mm), Right, Soft	0 / 50	0 / 50	1 / 50 SD 420	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Abdomen; 1, Large (>15mm), Ulcerated	0 / 50	0 / 50	1 / 50 SD 588	0 / 50	0 / 50
SD	Mass Abdomen; 1, Left, Medium (6-15mm)	2 / 50 SD 336	0 / 50	1 / 50 SD 448	0 / 50	0 / 50
SD	Mass Abdomen; 1, Medium (6-15mm)	1 / 50 SD 616	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Abdomen; 1, Medium (6-15mm), Right	3 / 50 SD 448	2 / 50 SD 392	2 / 50 SD 392	4 / 50 SD 378	0 / 50
SD	Mass Abdomen; 1, Right, Small (1-5mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 358
SD	Mass Abdomen; 2, Bilateral, Medium (6-15mm)	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Mass Abdomen; Firm	1 / 50 SD 84	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Abdomen; Left	0 / 50	1 / 50 SD 308	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Bilateral, Medium (6-15mm)	1 / 50 SD 392	0 / 50	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Dorsum; 1, Bilateral, Medium (6-15mm), Scabbed	1 / 50 SD 504	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Bilateral, Scabbed, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 532	0 / 50	0 / 50
SD	Mass Dorsum; 1, Large (>15mm), Left	0 / 50	0 / 50	1 / 50 SD 504	0 / 50	0 / 50
SD	Mass Dorsum; 1, Large (>15mm), Left, Ulcerated	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Large (>15mm), Right	1 / 50 SD 532	0 / 50	1 / 50 SD 606	2 / 50 SD 532	0 / 50
SD	Mass Dorsum; 1, Left, Medium (6-15mm)	2 / 50 SD 532	2 / 50 SD 616	2 / 50 SD 504	0 / 50	0 / 50
SD	Mass Dorsum; 1, Left, Medium (6-15mm), Scabbed	0 / 50	0 / 50	1 / 50 SD 532	0 / 50	1 / 50 SD 560
SD	Mass Dorsum; 1, Left, Small (1-5mm)	0 / 50	0 / 50	0 / 50	1 / 50 SD 560	1 / 50 SD 616

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Dorsum; 1, Left, Small (1-5mm), Ulcerated	1 / 50 SD 588	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Medium (6-15mm), Right	2 / 50 SD 504	0 / 50	1 / 50 SD 420	3 / 50 SD 392	2 / 50 SD 364
SD	Mass Dorsum; 1, Medium (6-15mm), Right, Scabbed	0 / 50	0 / 50	0 / 50	0 / 50	2 / 50 SD 532
SD	Mass Dorsum; 1, Medium (6-15mm), Right, Ulcerated	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Right, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 616	0 / 50	0 / 50
SD	Mass Dorsum; 1, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 588	0 / 50	0 / 50
SD	Mass Dorsum; 2, Bilateral, Large (>15mm)	0 / 50	0 / 50	1 / 50 SD 532	0 / 50	0 / 50
SD	Mass Dorsum; Hairless, Left	0 / 50	1 / 50 SD 224	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; Left	0 / 50	1 / 50 SD 308	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Ear; 1, Right, Small (1-5mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 336
SD	Mass Ear; 1, Right, Small (1-5mm), Ulcerated	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 364
SD	Mass Fore Limb; 1, Large (>15mm), Left	0 / 50	1 / 50 SD 532	0 / 50	0 / 50	0 / 50
SD	Mass Fore Limb; 1, Large (>15mm), Right, Ulcerated	0 / 50	1 / 50 SD 637	0 / 50	0 / 50	0 / 50
SD	Mass Fore Limb; 1, Left, Medium (6-15mm)	0 / 50	0 / 50	1 / 50 SD 638	0 / 50	0 / 50
SD	Mass Fore Limb; 1, Medium (6-15mm), Right	0 / 50	1 / 50 SD 392	0 / 50	0 / 50	1 / 50 SD 616
SD	Mass Fore Limb; 1, Medium (6-15mm), Right, Ulcerated	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Mass Fore Limb; Left	0 / 50	0 / 50	1 / 50 SD 476	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Fore Paw; 1, Left, Medium (6-15mm)	0 / 50	1 / 50 SD 392	0 / 50	0 / 50	0 / 50
SD	Mass Fore Paw; 1, Right, Small (1-5mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 504
SD	Mass Head; 1, Large (>15mm), Left	2 / 50 SD 448	0 / 50	0 / 50	0 / 50	1 / 50 SD 364
SD	Mass Head; 1, Large (>15mm), Left, Ulcerated	1 / 50 SD 585	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Head; 1, Large (>15mm), Right, Scabbed	0 / 50	0 / 50	1 / 50 SD 504	0 / 50	0 / 50
SD	Mass Head; 1, Large (>15mm), Right, Ulcerated	0 / 50	0 / 50	1 / 50 SD 560	0 / 50	0 / 50
SD	Mass Head; 1, Left, Medium (6-15mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 382
SD	Mass Head; 1, Left, Medium (6-15mm), Ulcerated	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Head; 1, Left, Small (1-5mm)	0 / 50	0 / 50	2 / 50 SD 336	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Head; 1, Medium (6-15mm), Right, Scabbed	0 / 50	0 / 50	0 / 50	1 / 50 SD 392	0 / 50
SD	Mass Head; 1, Right, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 364	0 / 50	0 / 50
SD	Mass Head; 1, Small (1-5mm)	0 / 50	2 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Mass Head; Left	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50
SD	Mass Head; Right	0 / 50	1 / 50 SD 308	0 / 50	0 / 50	0 / 50
SD	Mass Head; Small (1-5mm)	0 / 50	1 / 50 SD 308	0 / 50	0 / 50	0 / 50
SD	Mass Hind Limb; 1, Left, Small (1-5mm)	0 / 50	0 / 50	0 / 50	1 / 50 SD 560	0 / 50
SD	Mass Hind Limb; 1, Medium (6-15mm), Right	0 / 50	1 / 50 SD 638	0 / 50	0 / 50	1 / 50 SD 532
SD	Mass Hind Paw; 1, Left, Medium (6- 15mm)	1 / 50 SD 616	0 / 50	0 / 50	0 / 50	1 / 50 SD 616

Study Number: C11054B-01**Test Type:** TOX**Route:** Dosing in Water**Species/Strain:** Rat/Harlan Sprague Dawley**I05: Clinical Observations Summary (Chronic Animals)****Test Compound:** Sulfolane**CAS Number:** 126-33-0**Date Report Requested:** 01/28/2022**Time Report Requested:** 10:18:27**Lab:** Battelle**F1 Male: F1 Core Animals**

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Hind Paw; 1, Left, Medium (6-15mm), Ulcerated	1 / 50 SD 616	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Hind Paw; 1, Medium (6-15mm), Right	1 / 50 SD 560	1 / 50 SD 638	0 / 50	0 / 50	2 / 50 SD 588
SD	Mass Hind Paw; 1, Right, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 532	0 / 50	0 / 50
SD	Mass Testis; 1, Medium (6-15mm), Right	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Testis; Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 280	0 / 50
SD	Mass Thorax; 1, Bilateral, Large (>15mm)	0 / 50	2 / 50 SD 364	0 / 50	1 / 50 SD 560	0 / 50
SD	Mass Thorax; 1, Large (>15mm), Left	0 / 50	1 / 50 SD 455	0 / 50	1 / 50 SD 336	0 / 50
SD	Mass Thorax; 1, Large (>15mm), Left, Soft	0 / 50	1 / 50 SD 420	0 / 50	0 / 50	0 / 50
SD	Mass Thorax; 1, Large (>15mm), Right	1 / 50 SD 638	1 / 50 SD 504	0 / 50	2 / 50 SD 560	0 / 50

Study Number: C11054B-01**Test Type:** TOX**Route:** Dosing in Water**Species/Strain:** Rat/Harlan Sprague Dawley**105: Clinical Observations Summary (Chronic Animals)****Test Compound:** Sulfolane**CAS Number:** 126-33-0**Date Report Requested:** 01/28/2022**Time Report Requested:** 10:18:27**Lab:** Battelle**F1 Male: F1 Core Animals**

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Thorax; 1, Left, Medium (6-15mm)	0 / 50	1 / 50 SD 504	0 / 50	0 / 50	0 / 50
SD	Mass Thorax; 1, Left, Medium (6-15mm), Scabbed	0 / 50	1 / 50 SD 532	0 / 50	0 / 50	0 / 50
SD	Mass Thorax; 1, Medium (6-15mm), Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 560	1 / 50 SD 636
SD	Mass Thorax; 1, Right, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 392	0 / 50	0 / 50
SD	Opacity Eye; Bilateral	1 / 50 SD 561	0 / 50	0 / 50	1 / 50 SD 412	0 / 50
SD	Opacity Eye; Left	1 / 50 SD 588	1 / 50 SD 639	0 / 50	1 / 50 SD 588	0 / 50
SD	Pale	16 / 50 SD 442	12 / 50 SD 346	15 / 50 SD 430	14 / 50 SD 412	16 / 50 SD 280
SD	Paralysis Hind Limb; Bilateral	1 / 50 SD 606	0 / 50	0 / 50	0 / 50	0 / 50
SD	Partially Cannibalized	1 / 50 SD 514	2 / 50 SD 455	1 / 50 SD 607	1 / 50 SD 231	1 / 50 SD 224

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Prolapse Urogenital	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 616
SD	Salivation Post Dosing	0 / 50	0 / 50	0 / 50	1 / 50 SD 444	0 / 50
SD	Scab Abdomen; Bilateral	1 / 50 SD 420	0 / 50	0 / 50	0 / 50	0 / 50
SD	Scab Abdomen; Left	2 / 50 SD 112	0 / 50	0 / 50	0 / 50	0 / 50
SD	Scab Abdomen; Right	0 / 50	1 / 50 SD 616	1 / 50 SD 588	2 / 50 SD 336	0 / 50
SD	Scab Dorsum; Left	1 / 50 SD 616	0 / 50	0 / 50	0 / 50	0 / 50
SD	Scab Dorsum; Right	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 392
SD	Scab Fore Limb; Right	1 / 50 SD 189	0 / 50	0 / 50	0 / 50	0 / 50
SD	Scab Neck; Bilateral	0 / 50	0 / 50	0 / 50	1 / 50 SD 616	0 / 50
SD	Scab Neck; Right	0 / 50	0 / 50	1 / 50 SD 165	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Scab Tail; Bilateral	3 / 50 SD 448	0 / 50	0 / 50	2 / 50 SD 588	0 / 50
SD	Scab Tail	0 / 50	0 / 50	0 / 50	1 / 50 SD 420	0 / 50
SD	Seizure	2 / 50 SD 560	3 / 50 SD 332	3 / 50 SD 112	3 / 50 SD 168	1 / 50 SD 280
SD	Sore Face; Bilateral	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 532
SD	Sore Face; Left	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Sore Face; Right	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Sore Fore Limb; Left	0 / 50	0 / 50	1 / 50 SD 229	0 / 50	0 / 50
SD	Sore Hind Limb; Bilateral	0 / 50	0 / 50	1 / 50 SD 560	0 / 50	1 / 50 SD 560
SD	Sore Hind Limb; Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 560	0 / 50
SD	Sore Tail; Bilateral	0 / 50	1 / 50 SD 532	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Male: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Stained Anus; Bilateral, Brown	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 483
SD	Stained Anus; Brown	0 / 50	0 / 50	2 / 50 SD 483	0 / 50	0 / 50
SD	Swelling Fore Paw; Left	0 / 50	0 / 50	1 / 50 SD 607	0 / 50	0 / 50
SD	Swelling Hind Limb; Bilateral	1 / 50 SD 504	0 / 50	0 / 50	0 / 50	0 / 50
SD	Swelling Hind Limb; Right	1 / 50 SD 336	0 / 50	0 / 50	0 / 50	0 / 50
SD	Swelling Hind Paw; Left	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 373
SD	Swelling Hind Paw; Right	1 / 50 SD 532	0 / 50	0 / 50	0 / 50	0 / 50
SD	Thin	19 / 50 SD 322	16 / 50 SD 346	18 / 50 SD 165	21 / 50 SD 308	20 / 50 SD 280
SD	Tremors Mild	0 / 50	0 / 50	3 / 50 SD 140	0 / 50	1 / 50 SD 483
SD	Tremors Moderate	3 / 50 SD 322	1 / 50 SD 448	0 / 50	2 / 50 SD 308	0 / 50

Study Number: C11054B-01**Test Type:** TOX**Route:** Dosing in Water**Species/Strain:** Rat/Harlan Sprague Dawley**I05: Clinical Observations Summary (Chronic Animals)****Test Compound:** Sulfolane**CAS Number:** 126-33-0**Date Report Requested:** 01/28/2022**Time Report Requested:** 10:18:27**Lab:** Battelle**F1 Male: F1 Core Animals**

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Vocalization Severe	0 / 50	0 / 50	1 / 50 SD 140	0 / 50	0 / 50
SD	Weakness Hind Limb; Bilateral	7 / 50 SD 546	8 / 50 SD 525	8 / 50 SD 483	8 / 50 SD 392	7 / 50 SD 423
SD	Weakness Hind Limb	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 420
SD	Wound Abdomen; Right	0 / 50	0 / 50	1 / 50 SD 420	0 / 50	0 / 50
SD	Wound Dorsum; Left	0 / 50	0 / 50	0 / 50	1 / 50 SD 476	1 / 50 SD 532
SD	Wound Hind Limb; Left	1 / 50 SD 448	0 / 50	0 / 50	0 / 50	0 / 50
SD	Wound Mouth; Bilateral	0 / 50	0 / 50	1 / 50 SD 140	0 / 50	0 / 50
SD	Wound Neck; Bilateral	0 / 50	1 / 50 SD 448	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Alopecia Dorsum; Bilateral	0 / 50	0 / 50	1 / 50 SD 476	0 / 50	0 / 50
SD	Ataxia Mild	0 / 50	0 / 50	1 / 50 SD 252	0 / 50	1 / 50 SD 591
SD	Ataxia Moderate	1 / 50 SD 619	0 / 50	0 / 50	0 / 50	1 / 50 SD 603
SD	Ataxia No grade recorded	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 232
SD	Ataxia Severe	0 / 50	0 / 50	0 / 50	0 / 50	2 / 50 SD 504
SD	Breathing, gasping	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 535
SD	Breathing, labored	2 / 50 SD 458	2 / 50 SD 594	2 / 50 SD 584	0 / 50	1 / 50 SD 561
SD	Breathing, rapid	0 / 50	1 / 50 SD 556	0 / 50	1 / 50 SD 232	0 / 50
SD	Breathing, shallow	1 / 50 SD 584	0 / 50	0 / 50	0 / 50	1 / 50 SD 637
SD	Coat Ruffled	8 / 50 SD 518	15 / 50 SD 245	10 / 50 SD 361	11 / 50 SD 232	15 / 50 SD 232

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Cold To Touch	0 / 50	1 / 50 SD 555	3 / 50 SD 361	0 / 50	4 / 50 SD 232
SD	Convulsion	1 / 50 SD 28	0 / 50	0 / 50	0 / 50	0 / 50
SD	Damaged Tail	0 / 50	0 / 50	0 / 50	3 / 50 SD 0	1 / 50 SD 0
SD	Discharge Eye; Bilateral, Red	0 / 50	2 / 50 SD 504	0 / 50	0 / 50	0 / 50
SD	Discharge Eye; Left	0 / 50	2 / 50 SD 252	0 / 50	0 / 50	0 / 50
SD	Discharge Eye; Left, Red	2 / 50 SD 112	1 / 50 SD 448	3 / 50 SD 336	0 / 50	2 / 50 SD 602
SD	Discharge Eye; Red	2 / 50 SD 0	1 / 50 SD 308	0 / 50	2 / 50 SD 336	2 / 50 SD 122
SD	Discharge Eye; Red, Right	2 / 50 SD 560	0 / 50	0 / 50	0 / 50	0 / 50
SD	Discharge Nose/Snout; Bilateral, Red	3 / 50 SD 483	1 / 50 SD 504	1 / 50 SD 532	3 / 50 SD 476	1 / 50 SD 490
SD	Discharge Nose/Snout; Red	4 / 50 SD 224	7 / 50 SD 28	4 / 50 SD 0	3 / 50 SD 325	7 / 50 SD 122

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Discharge Nose/Snout; Red, Right	1 / 50 SD 560	0 / 50	0 / 50	0 / 50	0 / 50
SD	Discharge Vagina; Red	7 / 50 SD 196	0 / 50	2 / 50 SD 616	3 / 50 SD 196	3 / 50 SD 420
SD	Distended Abdomen	2 / 50 SD 560	3 / 50 SD 518	0 / 50	1 / 50 SD 560	0 / 50
SD	Eye Abnormality Bilateral	0 / 50	0 / 50	2 / 50 SD 514	1 / 50 SD 556	3 / 50 SD 232
SD	Eye Abnormality Left	1 / 50 SD 639	0 / 50	1 / 50 SD 479	0 / 50	1 / 50 SD 476
SD	Eye Abnormality Right	1 / 50 SD 0	0 / 50	0 / 50	1 / 50 SD 588	0 / 50
SD	Eye Shut Bilateral	2 / 50 SD 536	0 / 50	0 / 50	1 / 50 SD 597	0 / 50
SD	Gait Abnormal	1 / 50 SD 532	1 / 50 SD 245	0 / 50	0 / 50	2 / 50 SD 232
SD	Head Tilt	5 / 50 SD 308	0 / 50	1 / 50 SD 616	0 / 50	5 / 50 SD 428
SD	Hunched	0 / 50	3 / 50 SD 245	2 / 50 SD 325	4 / 50 SD 325	8 / 50 SD 232

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Hyperactivity	0 / 50	1 / 50 SD 454	1 / 50 SD 252	0 / 50	0 / 50
SD	Kinked Tail	4 / 50 SD 0	14 / 50 SD 0	8 / 50 SD 0	20 / 50 SD 0	13 / 50 SD 0
SD	Lethargic	9 / 50 SD 458	11 / 50 SD 245	12 / 50 SD 361	10 / 50 SD 325	13 / 50 SD 421
SD	Maloccluded/Broken Teeth	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	2 / 50 SD 560
SD	Mass Abdomen; 1, Bilateral, Large (>15mm)	2 / 50 SD 336	8 / 50 SD 420	3 / 50 SD 392	2 / 50 SD 504	7 / 50 SD 392
SD	Mass Abdomen; 1, Bilateral, Large (>15mm), Scabbed	0 / 50	0 / 50	1 / 50 SD 448	0 / 50	0 / 50
SD	Mass Abdomen; 1, Bilateral, Large (>15mm), Ulcerated	1 / 50 SD 531	1 / 50 SD 560	1 / 50 SD 336	0 / 50	0 / 50
SD	Mass Abdomen; 1, Bilateral, Medium (6- 15mm)	1 / 50 SD 448	2 / 50 SD 336	0 / 50	1 / 50 SD 476	3 / 50 SD 392
SD	Mass Abdomen; 1, Bilateral, Medium (6- 15mm), Ulcerated	1 / 50 SD 336	0 / 50	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass	11 / 50	9 / 50	6 / 50	9 / 50	7 / 50
	Abdomen; 1, Large (>15mm), Left	SD 336	SD 364	SD 448	SD 336	SD 448
SD	Mass	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50
	Abdomen; 1, Large (>15mm), Left, Ulcerated					SD 479
SD	Mass	10 / 50	7 / 50	6 / 50	7 / 50	2 / 50
	Abdomen; 1, Large (>15mm), Right	SD 392	SD 448	SD 392	SD 336	SD 504
SD	Mass	1 / 50	3 / 50	0 / 50	1 / 50	0 / 50
	Abdomen; 1, Large (>15mm), Right, Ulcerated	SD 518	SD 555		SD 486	
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	0 / 50
	Abdomen; 1, Large (>15mm), Ulcerated	SD 476				
SD	Mass	1 / 50	6 / 50	1 / 50	2 / 50	3 / 50
	Abdomen; 1, Left, Medium (6-15mm)	SD 392	SD 336	SD 639	SD 420	SD 420
SD	Mass	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50
	Abdomen; 1, Left, Medium (6-15mm), Scabbed					SD 448
SD	Mass	0 / 50	0 / 50	0 / 50	1 / 50	0 / 50
	Abdomen; 1, Medium (6-15mm)				SD 546	

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass	3 / 50	4 / 50	3 / 50	4 / 50	2 / 50
	Abdomen; 1, Medium (6-15mm), Right	SD 420	SD 364	SD 448	SD 504	SD 504
SD	Mass	2 / 50	5 / 50	1 / 50	2 / 50	2 / 50
	Abdomen; 2, Bilateral, Large (>15mm)	SD 448	SD 420	SD 504	SD 504	SD 476
SD	Mass	0 / 50	1 / 50	0 / 50	0 / 50	2 / 50
	Abdomen; 2, Bilateral, Large (>15mm), Ulcerated		SD 605			SD 392
SD	Mass	0 / 50	1 / 50	0 / 50	0 / 50	0 / 50
	Abdomen; 2, Bilateral, Medium (6-15mm)		SD 588			
SD	Mass	0 / 50	0 / 50	0 / 50	1 / 50	1 / 50
	Abdomen; 2, Large (>15mm)				SD 476	SD 336
SD	Mass	0 / 50	1 / 50	0 / 50	2 / 50	0 / 50
	Abdomen; 2, Large (>15mm), Left		SD 588		SD 336	
SD	Mass	0 / 50	0 / 50	0 / 50	1 / 50	0 / 50
	Abdomen; 2, Large (>15mm), Left, Scabbed				SD 420	
SD	Mass	0 / 50	1 / 50	0 / 50	1 / 50	0 / 50
	Abdomen; 2, Large (>15mm), Right		SD 616		SD 420	

Study Number: C11054B-01**Test Type:** TOX**Route:** Dosing in Water**Species/Strain:** Rat/Harlan Sprague Dawley**I05: Clinical Observations Summary (Chronic Animals)****Test Compound:** Sulfolane**CAS Number:** 126-33-0**Date Report Requested:** 01/28/2022**Time Report Requested:** 10:18:27**Lab:** Battelle**F1 Female: F1 Core Animals**

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Abdomen; Bilateral	1 / 50 SD 196	0 / 50	0 / 50	1 / 50 SD 252	0 / 50
SD	Mass Abdomen; Bilateral, Ulcerated	1 / 50 SD 308	0 / 50	0 / 50	1 / 50 SD 325	0 / 50
SD	Mass Abdomen; Left	2 / 50 SD 224	2 / 50 SD 84	1 / 50 SD 280	3 / 50 SD 84	1 / 50 SD 252
SD	Mass Abdomen; Right	0 / 50	0 / 50	1 / 50 SD 84	2 / 50 SD 140	0 / 50
SD	Mass Abdomen; Right, Soft	0 / 50	0 / 50	0 / 50	1 / 50 SD 112	0 / 50
SD	Mass Abdomen; Ulcerated	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 461
SD	Mass Dorsum; 1, Large (>15mm), Left	3 / 50 SD 448	2 / 50 SD 448	1 / 50 SD 504	0 / 50	1 / 50 SD 448
SD	Mass Dorsum; 1, Large (>15mm), Left, Ulcerated	0 / 50	0 / 50	1 / 50 SD 560	0 / 50	0 / 50
SD	Mass Dorsum; 1, Large (>15mm), Right	3 / 50 SD 420	1 / 50 SD 482	1 / 50 SD 504	0 / 50	1 / 50 SD 448

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Dorsum; 1, Large (>15mm), Right, Scabbed	1 / 50 SD 504	0 / 50	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Large (>15mm), Right, Ulcerated	0 / 50	0 / 50	1 / 50 SD 505	0 / 50	0 / 50
SD	Mass Dorsum; 1, Left, Medium (6- 15mm)	0 / 50	0 / 50	1 / 50 SD 504	0 / 50	1 / 50 SD 420
SD	Mass Dorsum; 1, Medium (6-15mm), Right	0 / 50	1 / 50 SD 448	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 1, Right, Small (1-5mm)	0 / 50	0 / 50	1 / 50 SD 336	0 / 50	0 / 50
SD	Mass Dorsum; 2, Large (>15mm), Right	0 / 50	1 / 50 SD 504	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; 2, Medium (6-15mm), Right	0 / 50	1 / 50 SD 420	0 / 50	0 / 50	0 / 50
SD	Mass Dorsum; Bilateral	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50
SD	Mass Dorsum; Left	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass	1 / 50	3 / 50	0 / 50	0 / 50	1 / 50
	Fore Limb; 1, Large (>15mm), Left	SD 336	SD 532			SD 336
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	0 / 50
	Fore Limb; 1, Large (>15mm), Left, Scabbed	SD 448				
SD	Mass	3 / 50	2 / 50	2 / 50	1 / 50	0 / 50
	Fore Limb; 1, Large (>15mm), Right	SD 476	SD 588	SD 504	SD 336	
SD	Mass	1 / 50	0 / 50	1 / 50	0 / 50	0 / 50
	Fore Limb; 1, Large (>15mm), Right, Ulcerated	SD 560		SD 639		
SD	Mass	0 / 50	1 / 50	0 / 50	0 / 50	0 / 50
	Fore Limb; 1, Left, Medium (6-15mm)		SD 588			
SD	Mass	1 / 50	0 / 50	1 / 50	0 / 50	0 / 50
	Fore Limb; 1, Medium (6-15mm), Right	SD 476		SD 448		
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	0 / 50
	Fore Limb; 2, Bilateral, Large (>15mm)	SD 616				
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	1 / 50
	Fore Limb; Left	SD 280				SD 252

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Fore Limb; Right	0 / 50	1 / 50 SD 140	0 / 50	1 / 50 SD 308	0 / 50
SD	Mass Fore Paw; 1, Large (>15mm), Left	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 420
SD	Mass Fore Paw; 1, Large (>15mm), Right	0 / 50	1 / 50 SD 448	0 / 50	0 / 50	0 / 50
SD	Mass Fore Paw; 1, Medium (6-15mm), Right	0 / 50	1 / 50 SD 420	0 / 50	0 / 50	0 / 50
SD	Mass Head; 1, Bilateral, Large (>15mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 476
SD	Mass Head; 1, Bilateral, Large (>15mm), Scabbed	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 504
SD	Mass Head; 1, Bilateral, Large (>15mm), Ulcerated	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 532
SD	Mass Head; 1, Large (>15mm), Left	0 / 50	0 / 50	2 / 50 SD 336	0 / 50	0 / 50
SD	Mass Head; 1, Large (>15mm), Left, Ulcerated	0 / 50	0 / 50	1 / 50 SD 364	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Head; 1, Large (>15mm), Right, Scabbed	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 504
SD	Mass Head; 1, Large (>15mm), Right, Ulcerated	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 560
SD	Mass Head; 1, Left, Medium (6-15mm)	0 / 50	0 / 50	1 / 50 SD 420	0 / 50	0 / 50
SD	Mass Head; 1, Medium (6-15mm), Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 588	0 / 50
SD	Mass Head; 1, Medium (6-15mm), Right, Ulcerated	0 / 50	0 / 50	0 / 50	1 / 50 SD 616	0 / 50
SD	Mass Head; 2, Right, Scabbed, Small (1- 5mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 476
SD	Mass Head; Left	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50
SD	Mass Hind Limb; 1, Large (>15mm), Left	1 / 50 SD 560	1 / 50 SD 532	0 / 50	0 / 50	1 / 50 SD 560
SD	Mass Hind Limb; 1, Large (>15mm), Right	1 / 50 SD 638	1 / 50 SD 639	1 / 50 SD 639	0 / 50	1 / 50 SD 392

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Hind Limb; 1, Large (>15mm), Right, Ulcerated	0 / 50	0 / 50	1 / 50 SD 560	0 / 50	0 / 50
SD	Mass Hind Limb; 1, Medium (6-15mm), Right	0 / 50	0 / 50	0 / 50	0 / 50	2 / 50 SD 532
SD	Mass Hind Limb; Left, Moveable	0 / 50	1 / 50 SD 196	0 / 50	0 / 50	0 / 50
SD	Mass Hind Limb; Left, Soft	0 / 50	0 / 50	0 / 50	1 / 50 SD 196	0 / 50
SD	Mass Hind Limb; Left, Ulcerated	0 / 50	1 / 50 SD 245	0 / 50	0 / 50	0 / 50
SD	Mass Hind Limb; Ulcerated	0 / 50	0 / 50	0 / 50	1 / 50 SD 232	0 / 50
SD	Mass Hind Paw; 1, Medium (6-15mm), Right	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 560
SD	Mass Hind Paw; 1, Right, Small (1-5mm)	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 532
SD	Mass Thorax; 1, Bilateral, Large (>15mm)	0 / 50	2 / 50 SD 532	0 / 50	3 / 50 SD 504	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Thorax; 1, Bilateral, Medium (6-15mm)	0 / 50	0 / 50	0 / 50	1 / 50 SD 420	0 / 50
SD	Mass Thorax; 1, Large (>15mm)	0 / 50	0 / 50	0 / 50	1 / 50 SD 364	0 / 50
SD	Mass Thorax; 1, Large (>15mm), Left	4 / 50 SD 336	6 / 50 SD 448	6 / 50 SD 336	5 / 50 SD 504	3 / 50 SD 504
SD	Mass Thorax; 1, Large (>15mm), Left, Ulcerated	0 / 50	1 / 50 SD 504	3 / 50 SD 336	0 / 50	1 / 50 SD 609
SD	Mass Thorax; 1, Large (>15mm), Right	9 / 50 SD 448	9 / 50 SD 336	5 / 50 SD 336	10 / 50 SD 336	6 / 50 SD 364
SD	Mass Thorax; 1, Large (>15mm), Right, Scabbed	0 / 50	2 / 50 SD 448	0 / 50	1 / 50 SD 420	0 / 50
SD	Mass Thorax; 1, Large (>15mm), Right, Ulcerated	1 / 50 SD 616	0 / 50	1 / 50 SD 336	1 / 50 SD 588	1 / 50 SD 588
SD	Mass Thorax; 1, Left, Medium (6-15mm)	1 / 50 SD 532	1 / 50 SD 364	2 / 50 SD 556	3 / 50 SD 504	1 / 50 SD 597
SD	Mass Thorax; 1, Left, Small (1-5mm)	0 / 50	0 / 50	0 / 50	1 / 50 SD 336	1 / 50 SD 476

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass	3 / 50	1 / 50	1 / 50	2 / 50	4 / 50
	Thorax; 1, Medium (6-15mm), Right	SD 448	SD 364	SD 560	SD 364	SD 532
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	2 / 50
	Thorax; 2, Bilateral, Large (>15mm)	SD 531				SD 420
SD	Mass	0 / 50	1 / 50	1 / 50	0 / 50	0 / 50
	Thorax; 2, Large (>15mm), Left		SD 616	SD 588		
SD	Mass	0 / 50	2 / 50	0 / 50	0 / 50	0 / 50
	Thorax; 2, Large (>15mm), Right		SD 532			
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	0 / 50
	Thorax; 2, Large (>15mm), Right, Scabbed	SD 532				
SD	Mass	1 / 50	0 / 50	0 / 50	0 / 50	0 / 50
	Thorax; 2, Large (>15mm), Right, Ulcerated	SD 560				
SD	Mass	0 / 50	0 / 50	1 / 50	0 / 50	0 / 50
	Thorax; 2, Left, Medium (6-15mm)			SD 560		
SD	Mass	2 / 50	0 / 50	3 / 50	0 / 50	1 / 50
	Thorax; Left	SD 140		SD 140		SD 252
SD	Mass	0 / 50	0 / 50	2 / 50	0 / 50	0 / 50
	Thorax; Left, Ulcerated			SD 308		

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Mass Thorax; Right	0 / 50	1 / 50 SD 140	1 / 50 SD 224	1 / 50 SD 224	0 / 50
SD	Mass Thorax; Right, Ulcerated	0 / 50	0 / 50	1 / 50 SD 308	1 / 50 SD 308	0 / 50
SD	Mass Thorax; Ulcerated	0 / 50	1 / 50 SD 476	0 / 50	0 / 50	0 / 50
SD	Missing Tail	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 0
SD	Opacity Eye; Left	1 / 50 SD 168	0 / 50	0 / 50	0 / 50	0 / 50
SD	Opacity Eye; Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 638	0 / 50
SD	Pale	14 / 50 SD 224	18 / 50 SD 245	17 / 50 SD 336	13 / 50 SD 232	14 / 50 SD 392
SD	Paralysis Hind Limb; Bilateral	1 / 50 SD 458	0 / 50	0 / 50	0 / 50	1 / 50 SD 561
SD	Partially Cannibalized	3 / 50 SD 307	3 / 50 SD 491	0 / 50	1 / 50 SD 557	3 / 50 SD 264
SD	Prolapse Vagina	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 616

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Scab Abdomen; Bilateral	0 / 50	1 / 50 SD 252	0 / 50	0 / 50	0 / 50
SD	Scab Dorsum; Bilateral	0 / 50	1 / 50 SD 336	1 / 50 SD 252	0 / 50	0 / 50
SD	Scab Face; Bilateral	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Scab Fore Limb; Bilateral	0 / 50	1 / 50 SD 252	0 / 50	0 / 50	0 / 50
SD	Scab Fore Limb; Right	0 / 50	1 / 50 SD 252	0 / 50	0 / 50	0 / 50
SD	Scab Head; Bilateral	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Scab Hind Limb; Bilateral	0 / 50	1 / 50 SD 454	0 / 50	0 / 50	0 / 50
SD	Scab Hind Limb; Left	1 / 50 SD 639	0 / 50	0 / 50	0 / 50	0 / 50
SD	Scab Hind Limb; Right	0 / 50	1 / 50 SD 252	0 / 50	0 / 50	0 / 50
SD	Scab Neck; Bilateral	0 / 50	1 / 50 SD 252	0 / 50	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

F1 Female: F1 Core Animals

Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Scab Neck; Right	0 / 50	0 / 50	1 / 50 SD 140	0 / 50	0 / 50
SD	Scab Tail; Left	0 / 50	0 / 50	0 / 50	0 / 50	1 / 50 SD 336
SD	Seizure	3 / 50 SD 28	3 / 50 SD 336	9 / 50 SD 168	1 / 50 SD 147	5 / 50 SD 119
SD	Sore Neck; Bilateral	0 / 50	1 / 50 SD 224	0 / 50	0 / 50	0 / 50
SD	Swelling Hind Limb; Bilateral	1 / 50 SD 483	0 / 50	0 / 50	0 / 50	0 / 50
SD	Swelling Nose/Snout; Right	0 / 50	1 / 50 SD 336	0 / 50	0 / 50	0 / 50
SD	Thin	12 / 50 SD 420	13 / 50 SD 384	10 / 50 SD 308	10 / 50 SD 325	15 / 50 SD 392
SD	Tremors Mild	1 / 50 SD 224	0 / 50	0 / 50	0 / 50	1 / 50 SD 535
SD	Weakness Fore Limb; Bilateral	1 / 50 SD 536	0 / 50	0 / 50	0 / 50	0 / 50
SD	Wound Head; Right	0 / 50	0 / 50	0 / 50	1 / 50 SD 532	0 / 50

Study Number: C11054B-01
Test Type: TOX
Route: Dosing in Water
Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)
Test Compound: Sulfolane
CAS Number: 126-33-0

Date Report Requested: 01/28/2022
Time Report Requested: 10:18:27
Lab: Battelle

F1 Female: F1 Core Animals						
Phase	Observation	Treatment Groups (mg/L)				
		0	30	100	300	1000
SD	Wound Thorax; Left	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50
SD	Wound Thorax; Right	0 / 50	0 / 50	1 / 50 SD 280	0 / 50	0 / 50

Study Number: C11054B-01

Test Type: TOX

Route: Dosing in Water

Species/Strain: Rat/Harlan Sprague Dawley

I05: Clinical Observations Summary (Chronic Animals)

Test Compound: Sulfolane

CAS Number: 126-33-0

Date Report Requested: 01/28/2022

Time Report Requested: 10:18:27

Lab: Battelle

LEGEND

Animals exhibiting clinical observations "within normal limits" were recorded as scheduled but are omitted from the table for clarity.

Upper row displays cumulative number of animals with observation / total animals started on study for SD days, total number of pregnant animals for GD days, or total number of littered females for LD days.

Lower row displays day of observation onset

SD – Study Day

**** END OF REPORT ****