

Study Number: C20302B-02
Test Type: TOX
Route: Whole-Body Inhalation
Species/Strain: Mouse/CD-1

PA09: Non-Neoplastic Lesions By Individual Animal
Test Compound: alpha-Pinene
CAS Number: 80-56-8
Final

Date Report Requested: 09/11/2025
Time Report Requested: 13:36:00
Lab: Battelle with EPL

Study Number:

C20302B-02

Study Sex:

Both

PWG Approval Date:

See web page for date of PWG Approval

Version:

v1.7.2

Male: Fertility Males																												
CD-1 Mouse Male 0 ppm	DAY ON TEST	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	ANIMAL ID	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
4		4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	*TOTAL			
ALIMENTARY SYSTEM																												
NONE																												
CARDIOVASCULAR SYSTEM																												
NONE																												
ENDOCRINE SYSTEM																												
NONE																												
GENERAL BODY SYSTEM																												
NONE																												
HEMATOPOIETIC SYSTEM																												
NONE																												
HEPATOBILIARY SYSTEM																												
NONE																												
IMMUNE SYSTEM																												
NONE																												
INTEGUMENTARY SYSTEM																												
SKIN												+															1	
MUSCULOSKELETAL SYSTEM																												
NONE																												
NERVOUS SYSTEM																												
NONE																												

Male: Fertility Males																											
CD-1 Mouse Male 0 ppm	DAY ON TEST	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	*TOTAL
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	9	9	9	9	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
		4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6		
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
REPRODUCTIVE SYSTEM																											
EPIDIDYMIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
DUCT, BILATERAL; EXFOLIATED GERM CELL																									1	1	
EPITHELIUM, BILATERAL; VACUOLATION			1	1		1			1	1		1			1	1					1					9	
TESTIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
ATYPICAL RESIDUAL BODIES		1				2							1										1			4	
GERMINAL EPITHELIUM; DEGENERATION				1														1		1		1				4	
RETE TESTIS; DILATION				1																						1	
SEMINIFEROUS TUBULE; DILATION				1																						1	
RESPIRATORY SYSTEM																											
NONE																											
SPECIAL SENSES SYSTEM																											
NONE																											
URINARY SYSTEM																											
URINARY BLADDER											+	+	+	+	+	+	+	+	+	+						10	
INFILTRATION CELLULAR; LYMPHOCYTE											1			1				1								3	

Species/Strain: Mouse/CD-1

PA09: Non-Neoplastic Lesions By Individual Animal

Test Compound: alpha-Pinene

CAS Number: 80-56-8

Final

Date Report Requested: 09/11/2025

Time Report Requested: 13:36:00

Lab: Battelle with EPL

Male: Fertility Males

CD-1 Mouse Male 100 ppm	DAY ON TEST	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	*TOTALS	
		<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		7
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
ALIMENTARY SYSTEM																										
NONE																										
CARDIOVASCULAR SYSTEM																										
NONE																										
ENDOCRINE SYSTEM																										
NONE																										
GENERAL BODY SYSTEM																										
NONE																										
HEMATOPOIETIC SYSTEM																										
NONE																										
HEPATOBIILIARY SYSTEM																										
NONE																										
IMMUNE SYSTEM																										
NONE																										
INTEGUMENTARY SYSTEM																										
SKIN		+1																								
MUSCULOSKELETAL SYSTEM																										
NONE																										
NERVOUS SYSTEM																										
NONE																										

Male: Fertility Males																												
CD-1 Mouse Male 100 ppm	DAY ON TEST	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>		
		<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	6	6	6	6	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0			
	*TOTAL																											
REPRODUCTIVE SYSTEM																												
EPIDIDYMIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
DUCT, BILATERAL; EXFOLIATED GERM CELL																	1										1	
INFILTRATION CELLULAR; MONONUCLEAR CELL																1			1								2	
EPITHELIUM, BILATERAL; VACUOLATION																							1				1	
EPITHELIUM; VACUOLATION			1	1				1						1					1	1							6	
TESTIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
ATYPICAL RESIDUAL BODIES								1	1						1				2	1					1		6	
GERMINAL EPITHELIUM; DEGENERATION		1						1					1		1			1									5	
RESPIRATORY SYSTEM																												
NONE																												
SPECIAL SENSES SYSTEM																												
NONE																												
URINARY SYSTEM																												
URINARY BLADDER												+	+	+	+	+	+	+	+	+	+						10	
INFILTRATION CELLULAR; LYMPHOCYTE																1	1										2	

Male: Fertility Males																											
CD-1 Mouse Male 200 ppm	DAY ON TEST	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	*TOTAL
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	ANIMAL ID	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4		4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
9		9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1		
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5			
ALIMENTARY SYSTEM																											
NONE																											
CARDIOVASCULAR SYSTEM																											
NONE																											
ENDOCRINE SYSTEM																											
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IMMUNE SYSTEM																											
NONE																											
INTEGUMENTARY SYSTEM																											
NONE																											
MUSCULOSKELETAL SYSTEM																											
NONE																											
NERVOUS SYSTEM																											
NONE																											

Male: Fertility Males																											
CD-1 Mouse Male 200 ppm	DAY ON TEST	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	*TOTAL
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
		9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
REPRODUCTIVE SYSTEM																											
EPIDIDYMIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
DUCT, BILATERAL; EXFOLIATED GERM CELL					1															1							2
INFILTRATION CELLULAR; MONONUCLEAR CELL				1																							1
EPITHELIUM, BILATERAL; VACUOLATION				1									1							1							3
TESTIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
ATYPICAL RESIDUAL BODIES																1					1						2
GERMINAL EPITHELIUM; DEGENERATION					1															2							2
RESPIRATORY SYSTEM																											
NONE																											
SPECIAL SENSES SYSTEM																											
NONE																											
URINARY SYSTEM																											
URINARY BLADDER												+	+	+	+	+	+	+	+	+	+						10
INFILTRATION CELLULAR; LYMPHOCYTE												1	1	1													3
INFILTRATION CELLULAR; MIXED CELL																			1								1

Male: Fertility Males																											
CD-1 Mouse Male 400 ppm	DAY ON TEST	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
		1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
		*TOTAL																									
REPRODUCTIVE SYSTEM																											
EPIDIDYMIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
INFLAMMATION; CHRONIC-ACTIVE																											1
EPITHELIUM, BILATERAL; VACUOLATION					1					1	1				1			1		1				1			8
EPITHELIUM; VACUOLATION						1	1	1											1		1				1		3
TESTIS		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
ATYPICAL RESIDUAL BODIES		1																		1			1			1	4
GERMINAL EPITHELIUM; DEGENERATION					1							1			1				1								4
SEMINIFEROUS TUBULE; SPERMATID RETENTION																				1							1
RESPIRATORY SYSTEM																											
NONE																											
SPECIAL SENSES SYSTEM																											
NONE																											
URINARY SYSTEM																											
URINARY BLADDER												+	+	+	+	+	+	+	+	+	+						10
INFILTRATION CELLULAR; LYMPHOCYTE													1	1		1				1							4
INFILTRATION CELLULAR; MAST CELL																		1									1
INFILTRATION CELLULAR; MIXED CELL																			1		1						2
VACUOLATION; CYTOPLASMIC																					1						1

Study Number: C20302B-02

Test Type: TOX

Route: Whole-Body Inhalation

Species/Strain: Mouse/CD-1

PA09: Non-Neoplastic Lesions By Individual Animal

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CAS Number: 80-56-8

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LEGEND

*TOTAL = Total animals with tissue examined microscopically: Total animals with lesion and average severity grade if appropriate.

+ = Tissue examined microscopically

X = Lesion present

A = Autolysis precludes evaluation

I = Insufficient tissue

M = Missing slides

N = No section present

P = Artifact precludes examination

R = Not examined read-down

BLANK = Not examined microscopically

1-4 = Lesion qualified as: 1) minimal; 2) mild; 3) moderate; 4) marked

**** END OF REPORT ****