FINAL REPORT

LABORATORIES AMERICA, INC.



ROGER G. PERKINS MINNESOTA MINING & MANUFACTURING COMPANY TOXICOLOGY SERVICES ST. PAUL, MN 55101

SAMPLE NUMBER: 61005209

SAMPLE ENTERED: 10/23/86

REPORT PRINTED: 01/13/87

SAMPLE: T-3974 LOT 390

PURCHASE ORDER NUMBER: T757575-TBR 632

ENCLOSED: PRIMARY EYE IRRITATION STUDY IN RABBITS - METHOD, SUMMARY

RAW DATA APPENDIX

SIGNED:

STEVEN M. GLAZA

STUDY DIRECTOR ACUTE TOXICOLOGY 1-14-87

BY AND FOR HAZLETON LABORATORIES AMERICA, INC.

RAW DATA FOR THIS STUDY ARE KEPT ON FILE AT HAZLETON LABORATORIES AMERICA, INC., MADISON, WISCONSIN.

> **Exhibit** 2808

State of Minnesota v. 3M Co.. Court File No. 27-CV-10-28862

PAGE

3301 KINSMAN BLVD. • P.O. BOX 7545 • MADISON, WISCONSIN 53707 • PHONE (608) 241-4471 • TLX 703956 HAZRAL MDS UD

SAMPLE NUMBER: 61005209

SAMPLE: T-3974 LOT 390

EYE IRRITATION

Objective: To determine the level of irritation produced following a single exposure of a test material to one eye of albino rabbits according to the U.S. Environmental Protection Agency's Guidelines for Testing Pesticides and Toxic Substances.

Test Material: T-3974 Lot 398

Physical Description: Fine white powder

Purity and Stability: Sponsor assumes responsibility for purity and stability determinations.

Test Animal: Young adult rabbits of the New Zealand White strain were procured, maintained individually in screen-bottom cages in temperature—and humidity-controlled quarters, provided access to water <u>ad libitum</u> and a measured amount of Purina High Fiber Rabbit Chow, and held for an acclimation period of at least 7 days.

Six acclimated animals, weighing from 2340 to 2800 g, were chosen at random for the test. The animals' eyes were examined within 24 hours prior to test material administration using sodium fluorescein dye procedures. Only those animals with no sign of ocular injury or irritation were used on the test. Test animals were identified by animal number and corresponding ear tag.

Reason for Species Selection: The New Zealand White albino rabbit is the animal of choice based upon its large orbit and nonpigmented iris.

Preparation of Test Material: The sample was dosed as received. A bulk density determination was made to determine the weight equivalent of a 0.1 ml dose.

Treatment: Each rabbit received 0.05 g (0.1 ml weight equivalent) of the test material placed on the everted lower lid of one eye, with the contralateral eye serving as the untreated control. The upper and lower lids were gently held together for one second to prevent loss of material and then released. The eyes of the rabbits remained unflushed.

Reason for Route of Administration: Historically, the route of choice based on the method of Draize.

SAMPLE NUMBER: 61005209

PAGE 3

SAMPLE: T-3974 LOT 390

EYE IRRITATION

(CONTINUED)

Observations: The treated eyes were observed for ocular irritation at 1, 24, 48, 72 and 96 hours, and at 7 days after treatment. Because injury was present at 7 days, observations were continued at 14 and 21 days.

At the 72-hour and 7, 14 and 21-day readings, sodium fluorescein was used to aid in revealing possible corneal injury. Irritation was graded and scored according to the Draize technique.

Animals we're weighed just prior to test material administration and at weekly intervals during the study.

Pathology: At study termination all animals were euthanatized and discarded.

SAMPLE NUMBER: 61005209

PAGE 4

SAMPLE: T-3974 LOT 390

EYE IRRITATION

(CONTINUED)

SUMMARY

Test Animal: Albino rabbits - New Zealand White Source: Hazleton Research Products, Inc., Denver PA

Date Animals Received: 10/21/86

Date Test Started: 11/17/86

Date Test Completed: 12/08/86

PRIMARY EYE IRRITATION SCORES*

	6 Rabbit Mea 0.05 q
OBSERVATION PERIOD	(Unwashed)
1 Hour:	39.0
24 Hours:	36.5
48 Hours:	34.8
72 Hours:	33.5
96 Hours:	30.0
7 Days:	35.2
14 Days:	20.8 **
21 Days:	17.5

^{*} The Primary Eye Irritation Score is the total eye irritation score for all the animals divided by the number of animals (6) at each observation period.

^{**}Based on a 5-animal mean.

SAMPLE NUMBER: 61005209 PAGE 5

SAMPLE: T-3974 LOT 390

EYE IRRITATION

(CONTINUED)

Table 1 Individual Eye Irritation Scores

Animal Number	Observation Period	Corn A	B	Score AXBX5	īris A	Score A X 5	Con A	junct B	ivae C	Score (A+B+C)2
F15615	1 Hour 24 Hours 48 Hours 72 Hours 96 Hours 7 Days 14 Days 21 Days	1 1 1 1 2 1	4 4 3 3 1 1	20 20 20 15 15 10 5	1 1 1 1 1 1 0	5555550	2 2 2 2 2 2 2 2 1	3 3 3 3 3 3 3 2	3 2 2 1 1 1 1	16 14 14 12 12 12 12
F15616	1 Hour 24 Hours 48 Hours 72 Hours 96 Hours 7 Days 14 Days 21 Days	1 1 1 1 2 1 3	4 4 4 2 1 1	20 20 20 20 10 10	1 1 1 1 0 0	5555000	2 2 2 2 2 2 1 0	3 3 3 3 2 1 2	3 2 2 2 2 2 1 0	16 14 14 14 14 10 4
F15591	1 Hour 24 Hours 48 Hours 72 Hours 96 Hours 7 Days 14 Days 21 Days	1 1 1 1 2 1	3 2 2 1 2 1	15 15 10 10 5 20 5	1 1 1 1 1 1 0	5 5 5 5 5 0 0	2 2 2 2 2 2 0 0	2 2 2 2 2 2 2 0	3 2 1 1 1 0 0	14 12 10 10 10 10
F15618	1 Hour 24 Hours 48 Hours 72 Hours 96 Hours 7 Days 14 Days 21 Days	1 1 1 1 2 0	4 4 3 3 1 0	20 20 20 15 15 10 0	1 1 1 1 1 0 0	5 5 5 5 5 0 0	2 2 2 2 2 2 0 0	3 1 2 2 2 2 2 0 0	3 2 2 1 1 1 0	16 10 12 10 10 10

SAMPLE NUMBER: 61005209 PAGE 6

SAMPLE: T-3974 LOT 390

EYE IRRITATION

(CONTINUED)

Table 1 (continued) Individual Eye Irritation Scores

Animal	Observation	Cor	nea	Score	Iris	Score	Con	junct	ivae	Score
Number	Period	A	8	AXBX5	A	A X 5	Α	В	С	(A+B+C)2
F15619	1 Hour	1	3	15	1	5	2	3	3	16
	24 Hours	1	4	20	1	5	2	2	2	12
	48 Hours	1	3	15	1	5	2	2	2	12
	72 Hours	1	3	15	1	5	2	3	2	14
	96 Hours	1	3	15	1	5	2	3	2	14
	7 Days	1	3	15	1	5	2	3	2	14
	14 Days	3	3	45	1	5	3	3	3	18
	21 Days	4	1	20	0	0	2	3	3	16
F15620	1 Hour	1	4	20	1	5	2	3	3	16
,	24 Hours	1	4	20	1	5	2	2	2	12
	48 Hours	1	4	20	1	5	2	2	2	12
	72 Hours	1	4	20	1	5	3	3	2	16
	96 Hours	2	1	10	1	5	3	4	3	20
	7 Days	3	3	45	1	5	3	4	3	20
	14 Days	4	4	80	*	*	3	4	3	20
	21 Days	4	1	20	0	0	1	3	2	12

^{*} Unable to visualize due to severe opacity.

Table 2 Sodium Fluorescein Examination

Animal		Observatio	n Period		
Number	Pre-initiation	72 Hours	7 Days	14 Days	21 Days
F15615	NEG	POS (60%)	POS (25%)	POS (15%)	NEG
F15616	NEG	POS (20%)	POS (10%)	POS (5%)	POS (5%)
F15591	NEG	POS (45%)	POS (30%)	POS (5%)	NEG
F15618	NEG	POS (30%)	POS (15%)	NEG	NEG
F15619	NEG	POS (60%)	POS (70%)	POS (40%)	POS (25%)
F15620	NEG	POS (100%)	POS (60%)	POS (50%)	POS (10%)

NEG = No stain retention

POS = Positive stain retention (area of cornea involved).

SAMPLE NUMBER: 61005209 PAGE 7

SAMPLE: T-3974 LOT 390

EYE IRRITATION

(CONTINUED)

Comments:

A pain response (vocalization) was elicited from two animals following instillation of the test material. Five animals exhibited excessive pawing at the treated eye following dosing.

Blanching of the conjunctivae was seen in all six animals at 1 hour, in four animals at 24 hours, in all six animals at 48, 72 and 96 hours, and in five animals at 7 days.

Petite hemorrhaging of the conjunctivae was exhibited by two animals at 24 hours, by three animals at 48 hours, by four animals at 72 hours, by all six animals at 96 hours, and by three animals at 7 days.

Hair loss around the eye was seen in one animal at Day 14.

Corneal epithelial peeling was observed in three animals at 24 hours, in three animals at 48 hours, in all six animals at 72 and 96 hours and 7 days, in five animals at 14 days, and in three animals at 21 days.

Corneal negrouscularization was seen in five animals at 7 days, in all six animals at 14 days, and in three animals at 21 days.

Pannus was observed in one animal at 96 hours, and in one other animal at 7 days.

Three animals exhibited granulation scar tissue at 21 days.

At the 14-day observation, the iris of one animal (F15620) could not be visualized due to the severe opacity.

References:

- Hitch, R.K., "Primary Eye Irritation Study," Pesticide Assessment Guidelines, Subdivision F, Hazard Evaluation: Human and Domestic Animals, U.S. Environmental Protection Agency Office of Pesticide and Toxic Substances Series 81-4, pp. 51-55 (November 1982).
- Draize, J.H., "Appraisal of the Safety of Chemicals in Foods, Drugs, and Cosmetics - Dermal Toxicity." Association of Food and Drug Officials of the U.S., pp. 46-59 (1975).
- DHHS Publication No. (NIH 85-23 1985) Guide for the Care and Use of Laboratory Animals.

PROTOCOL - APPENDIX I

	omes
	1) Opacity - degree of density (area most dense taken for reading)
Me	opacity
34	mattered or diffuse area, details of iris clearly visible
E	usily discernible translucent areas, details of iris
0	palescent areas, no details of iris visible, size of pupil
1	parely discernible
Q	peque, iris invisible
(1	3) Area of cornea involved
Oı	3) Area of cornea involved se quarter (or less), but not zero
G	rester than one quarter, but less than half
G	reater than one quarter, but less than half
G	wester than three quarters, up to whole ares
	A x B x 5 Total Maximum = 80
)]	<u>iria</u>
_	Yalues .
X	rual lds above normal, congestion, swelling, circumcorneel injection
r	any or all of these or combination of any thereof) iris still
(THE CLASS OF CONDITION OF STATEMENTS TO SELECT THE SECOND
_1	eacting to light (sluggish reaction is positive)
	reaction to light, hemorrhage, gross destruction (any or all
•	these)
	Bobal Handman - 46
	A x 5 Total Maximum = 10
	•
2 (on tunctivee
	1 B. L
_ (1) Redness (refers to palpebral conjunctivae only) seels normal seels definitely injected above normal
10	188613 NOTEL
	medity discernible
-	ffuse beefy red
Di	Titing peety Led
) Chemosis
H	swelling
Ā	y swelling above normal (includes nictitating membrane)
Ot	wious swelling with partial eversion of lids
Sı	selling with lids about half closed
31	relling with lide about helf closed to completely closed
	M. M. Lawren
) Discharge
H	
	y amount different from normal (does not include small amounts
-	inserved in inner canthus of normal animals) scharge with moistening of the lids and hairs just adjacent
	makes with maistening of the lids and hairs just adjacent
D:	
Di	A 11ds
D:	so lids
D:	A 11ds
D:	solids
D:	solids
Di Di	Score (A + B + C) x 2 Total Maximum = 20
Di Di	Score (A + B + C) x 2 Total Maximum = 20 to total moore for the eye is the sum of all scores obtained for the
Di Di	Score (A + B + C) x 2 Total Maximum = 20

PRIMARY EYE IRRITATION TEST

HLA No. La

Initial Sodium Fluorescein Exam and Animal Body Weights

186 pH meter No. NA Test Material: Sample: T-3974 Lot 390 Date: 11/4 O. I w WEIGHT EQUIVAGE Physical Description: Fine white powder Review of folder preparation by: ŊΑ pH result: (Dose: 0.05% Room Number:

QU Date: 11-17-812 All animals appeared normal just prior to dosing. HAZLETON RESEARCH PRODUCTS, INC. Date Animals Received: 10-21-86NEW ZEALAND WHITE Technician: RABBIT Species: Strain: Source:

(g) Dosed in the conjunctival sac. The upper and lower lids	Day 21	3230	2776	5 3046 forced blinking or manipulation.	\$ 2917 * - Sodium Fluorescein Examination.	2790 NEG -	2723 NA -	Y - Yes	N - NO M - Male	Time of Dosing: 11-17-80	Firet	=	@Excessive powing at dosed eye. Kp 14-17-10 Tech: (SMC Date: 11-17-20
e ight =	Day 14	अड्र	2584	3945	3348	3746	Pross			Sylc Sylc	त्	50078	dosed e
Animal Body Weights (g)	Day 7	\$66C	लुड्ल	अन्यत	0739	JOTO	Opoco	-		(Mc	ho/ _{II} I	নেগমি	الم فيرسط
∢	Initiation	2800	2359	אררב	2564	2515	2340			Ges	11-17	15019	@Excessive
Vocal- ization	Following	©N	ωN	N®	N	ه ک	®			RH	21-11	KTRUN	
-	Initial SF*	UEB-	NEG	UEB	NEB	NEG	WER			Sider	11/5		11-16-8
	Sex	8	B	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	す		of			\vdash	- 2		Oentry error 11-16-86 SAM
7/3	Animal No.	5/0/5	56 16	Ì	8/9/9	5/2/9	56.30			TECHNICIAN SAM	DATE 1986	SCALE USED	Ocht.

st Eye: Right	·			Grou	p: <u>NA</u>	
<u>NA</u> Washed: <u>NA</u> s	econds following the test eye was ap water for A	s washed wi	th <u>NA</u> ml (st material of lukewarm	, <u>~</u>	Inwashed
		OBSERVATIO	N PERIOD:	Ihr		
	=1- 5615	5616	5591	5618	5619	5620
Location of Corneal Lesions Tail Head						
Cornea - Opacity		1.		l	ŀ	
Area	4	4	3	4	3 .	4
Iris	I	Ţ	ĮI	Į,I	jŦ	Ŧ
Conjunctivae - Redness	B &	o ^B	a B	S S	B	B 2
Chemosis	3	3_	ی	3	3	3
Discharge	3C	3C	34	36	30	32
Sodium Fluorescein	Exam NA	NA	NA	NA.	NA	NA
Technician (Mc Date 11-17-80		•				•
F - Necrotic A	orrhage harge ischarge around the eye reas visualize due t	to.	K - Co L - Co M - Hy N - Co P - Pa R - Ur S - Gr POS - Po	rneal epith rneal epith popyon rneal neova nnus able to via vere opacit anulation a sitive state	nelial dama nelial dama ascularizat sualize due ty scar tissue in retentio	ge, pitting ion to

(4253A)

t Eye: Right				Group	o: <u>NA</u>	
NA Washed: NA seconthe to tap w	est eye wa:	ng instilla s washed wi <u>IA-</u> seconds.	th <u>NA</u> mL o	t material f lukewarm	•	Inwashed
		OBSERVATIO	N PERIOD:	24 hr.	S	
imal No. FI-	5615	5616	5591	5618	5619	5620
ocation of orneal Lesions						
ail Head	ASSELLE!	7-202	J=0%		1	J=86%
ornea - Opacity	4	C.	3	4	4 .	4
Area	工	I I	ı£	II.	1F	1 ^I
ris						
onjunctivae =		0.4	00	2B	23	2
Redness	2AB	2 A	213	A:D	2	2
Chemosis	_3	3	2	2		20
Discharge	<u> 2c</u>	2c NA	2c NA	DC NA.	2c NA	NA
echnician 68 / 56		No opacity	<u> </u>			,
NA - Not Applicable A - Petite hemorrha B - Blanching C - Clear discharge D - Purulent discha E - Hair loss arour F - Necrotic Areas G - Unable to visua severe swelling H - No reaction to I - Injected	e arge nd the eye nlize due 1		K - Co L - Co M - Hy N - Co P - Pa R - Un se S - Gr POS - Po	rneal epith rneal epith popyon rneal neovenus table to visuable to visuable to stative state.	melial dama melial dama ascularizat sualize due ty scar tissue in retentio	ge, pitting ion to
			1			21,5

Area	t Eye: Right					o: <u>NA</u>	
nimal No. F1- 5615 5616 5591 5608 5609 5620 ocation of orneal Lesions ail Head ornea - Opacity Area	the t	est eye was	s washed wi	th <u>NA</u> mil t	st material of lukewarm	, <u> </u>	Unwashed
orneal Lesions ail Head ornea - Opacity Area I			OBSERVATIO	N PERIOD:	48 hrs		
Tail Head Cornea - Opacity Area Liris Conjunctivae - AB AB B B B B B B B B B B B B B B B B		5615	5616	5591	5618	5619	5620
Cornea - Opacity Area Iris Conjunctivae - Redness Chemosis Discharge Sodium Fluorescein Exam NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - Reservice to light II - II	orneal Lesions						
Iris Conjunctivae - AB AB B B B B AB B B B B B B B B B B				I45%		3=70%	J=80%
Iris Conjunctivae - AB AB B B B B AB AB B B B B AB AB B B B B B B B B B B B B B B B B B B B		,1	Ц.		4	3 .	4
Redness			I	,Ŧ	Ŧ	1	I
Redness Chemosis Discharge Chemosis Discharge Chemosis Chemo		470	0.70				Ø₽.
Chemosis 3 3 3 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1 '	1	ე ^B		1	
Discharge OC DD ID DD DD DD Sodium Fluorescein Exam NA				a	0×2	a	a
Sodium Fluorescein Exam NA			2D	ID	(SD	30	020
Technician			NA	NA	NA.	NA	· NA
A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected K - Corneal epithelial damage, pilting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention NEG - Negative stain retention Potition Neg - Positive Stain retention NEG - Negative Stain retention Potition Neg - Positive Stain retention NEG - Negative Stain retention	Date 11-19-80		·			lial dama	
G - Unable to visualize due to severe swelling S - Granulation scar tissue H - No reaction to light POS - Positive stain retention I - Injected NEG - Negative stain retention eviewed By: Date: 10-86 Eye Irritation Score: 348	A - Petite hemorrh B - Blanching C - Clear discharg D - Purulent disch E - Hair loss arou	age e narge ind the eye		K - Co L - Co M - Hy N - Co P - Pa	rneal epith prneal epith popyon prneal neov unnus	nelial dama helial dama ascularizat	age, piling age, pitting tion
eviewed By: 900 Date: 10-10-86 Eye Irritation Score: 348 Slu 11-19-	G - Unable to visu severe swellin	ialize due 1 ng	to	S - Gr POS - Po	vere opacion ranulation sitive sta	ty scar tissue in retentio	e on
							اخن

t Eye: Right				Grou	p: <u>NA</u>	
NA Washed: NA second the tap	test eye wa	is washed wi <u>wa</u> seconds.	th <u>NA</u> mL (or lukewarm		Unwashed
	1 - 1	T .	N PERIOD:		<u> </u>	
imal No. Fl- cation of rneal Lesions il Head	5615	5616	5591	5618	5619	5630
rnea - Opacity	3:40%	5-20%	J=45%	5-30%	5=6090	J-1000
Area	3	4	2	3	3 .	4
is	, I	, I	, I	, I	, I	, I
njunctivae -						
Redness	2 AB	2 48	28	2.8	2 48	3 98
Chemosis	3	3	2	2	3	3
Discharge	ic	20	10	10	DC	20:
dium Fluorescein Exa	m Pos.100%	Pos20%	Pos45%	Pos 30%	P2561%	As 100%
echnician Smc/9						
ite 11-00-86	-	• •				
NA - Not Applicabl A - Petite hemorr B - Blanching C - Clear dischar D - Purulent disc E - Hair loss aro F - Necrotic Area G - Unable to vis severe swelli H - No reaction t I - Injected	hage ge harge und the eye s ualize due ng	to.	K - Co L - Co M - Hy N - Co P - Pa R - Ur Se S - Gr POS - Po NEG - No	rneal epith rneal epit popyon rneal neov	nelial dama helial dama ascularizat sualize due ty scar tissue in retentic in retentic	e to

3MA10001104

	•	Primary Eye					
est Materia	1: <u>Samp</u>	1c: T-39	174 Lo-	t 390			
st Eye: R	ight				Grou	p: <u>NA</u>	 .
<u>NA</u> Wash	ed: <u>MA</u> secon the t tap v	nds followi test eye wa: water for <u>w</u>	s washed wi	th NA mL o	st material of lukewarm		Ínwashed
		1	OBSERVATIO	N PERIOD:	96 hos	<u> </u>	1
Animal No.	F1-	5615	5/01/2	5591	5618	5619	5620
ocation of Corneal Les	ions						
Cornea - Op		5=7590P	3=40%	3-25%	5=75%	5-10%	7=100%
	ea	3	2	1	3	3	\
Iris	=======================================	\I)I	\I	Į I	II	1 ^I
Conjunctiva	ie -	AB	AB	AB	AB	BA	3 AB
Re	dness	1 2	2	2	2	2	3
Ch	emosis	3	3	2	5	3	4
Di	scharge	10	20	10	10	20	3D
Sodium Fluc	rescein Exam	NA	NA	NA	NA.	<u>NA</u>	NA
Technician Date <u>/</u>			٠,				
A - Pe B - B C - C1 D - Pt E - Ha F - No G - Ur	ot Applicable tite hemorrh lanching ear discharg urulent disch ir loss arou ecrotic Areas hable to visu evere swellin o reaction to	age arge nd the eye alize due t		K - Co L - Co M - Hy N - Co P - Pa R - Un S - Gr POS - Po NEG - Ne	rneal epith rneal epith popyon rneal neove nnus lable to via vere opacit anulation sitive sta	nelial dama helial dama ascularizat sualize due ty scar tissue in retentio	ige, pitting ion to
eviewed By		Ω_{∞}	Date: /	0-10-86	Eye Irr	itation Sco	re: <u>2010</u>

3MA10001105

(4253A)

Area	OBSERVATION PERIOD: 7 days Animal No. F1- 56 5 56 6 5591 56 8 56 9 56 20 Corneal Lesions Fail Head Cornea - Opacity Area Iris Conjunctivae - Redness Chemosis Discharge IC IC ID IC OC 3T Sodium Fluorescein Exam Posos 7 Phs1070 Phs3070 Phs 1570 Phs 7070 Phs56070 MA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected C - Clear discharge B - Redness C - Corneal epithelial damage, piling C - Corneal epithelial dam	<u>NA</u> Washed	the t	est eye wa	s washed wi	th NA mL	st material of lukewarm		Únwashed
Animal No. F1- 56 5 5 0 0 559 56 8 5 0 9 5 000 Location of Corneal Lesions Tail Head Cornea - Opacity	Animal No. F1- 5615 5616 5591 5618 5619 5620 Location of Corneal Lesions Tail Head Cornea - Opacity Area Iris Conjunctivae - Redness Chemosis Discharge IL IC ID IC OC 3T Sodium Fluorescein Exam Process To Proceed Proceedings B - Blanching C - Clear discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected Area I		tap v	vater for <u>k</u>	<u>∤A</u> seconds.	•			
Location of Corneal Lesions Tail Head Cornea - Opacity Area Iris Conjunctivae - Redness Chemosis Discharge IC IC ID IC OC 3T Sodium Fluorescein Exam Posos 7 Positivation B - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light H - No reaction to light I - Corneal epithelial damage, pelling K - Corneal epithelial damage, piling L - Corneal epithelial damage, piling L - Corneal epithelial damage, piling C - Clear discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light NEG - Negative stain retention	Location of Corneal Lesions Tail Head Cornea - Opacity				OBSERVATIO	N PERIOD:	7 days	· · · · · · · · · · · · · · · · · · ·	
Corneal Lesions Tail Head Cornea - Opacity	Corneal Lesions Tail Head Cornea - Opacity Area Iris Conjunctivae - Redness Discharge IC IC ID IC OC 3T Sodium Fluorescein Exam Posos 76 Poslo 76 Poslo 76 Poslo 76 NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected Telood-like discharge H-Nacont		F1-	5615	5/016	5591	5618	5619	5620
Cornea - Opacity Area Iris Conjunctivae - Redness Chemosis Discharge IL C D C OC ST Sodium Fluorescein Exam Posos 7 Posito 70 Posito 70 Posito 70 RA - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light FOS - Positive stain retention NEG - Negative stain retention NEG - Negative stain retention	Cornea - Opacity Area Iris IF O Redness AB B B B AB AB AB AB AB AB	Corneal Lesio	•						
Area Iris Conjunctivae - Redness AB B B B AB AB AB AB AB AB	Area		-	J=038N	J=10% N		J= 15% N	J= 70% N	J=60% P
Iris Conjunctivae - Redness AB B B AB AB AB AB AB AB AB	Iris Conjunctivae - Redness AB B B AB AB AB AB AB AB AB	Cornea - Opac	ity	2	<u>a</u>	<u>```</u>	2	2 .	3
Iris Conjunctivae - Redness	Redness AB B AB AB AB AB AB A	Area		T		N T	I	<u>J</u>	J.T
Redness Chemosis Discharge IC IC ID IC OC 3T Sodium Fluorescein Exam Posos 7 Pos 10 70 Pos 30 70 Pos 15 70 Pos 70 70 Pos 10 70 Technician () MC Date	Redness	Iris			0	1	1	1	
Chemosis 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Redness 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Conjunctivae	+		- 7B	В	AB	AB	
Discharge 1C 1C 1D 1C 2C 3T Sodium Fluorescein Exam Posos 7 Pos 10 70 Pos 30 70 Pos 15 70 Pos 10 70 Technician () MC Date 10 Posos 70 Pos 10 70 Pos 30 70 Pos 15 70 Pos 10 70 NA - Not Applicable	Discharge 16 16 16 16 3T Sodium Fluorescein Exam Poso 7 Pos 10 Pos 30 Pos 15 Pos 70 Pos 15 Pos 10 Pos 15 Pos 15 Pos 10 Pos 15 P	Redn	ess	SHB	1	8	a	2	3
Sodium Fluorescein Exam Posos 7 Pos 10 70 Pos 30 70 Pos 1570 Pos 1070 Pos 1070 NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected NA - Not Applicable A - Pos 10 70 Pos 1070 Pos 107	Sodium Fluorescein Exam Posos 7 Pos 10 7 Pos 30 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 10 7 Pos 10 7 Pos 15 7 Pos 15 7 Pos 10 7 Pos 15 7 Pos 15 7 Pos 10 7 Pos 15	Chem	osis	3	2	2	2	3	Q 4
Technician () MC Date () Corneal epithelial damage, peeling A - Petite hemorrhage	Technician	Disc	harge	16	IC	ID	10	OC.	3T
Technician () MC Date 11-00-80 NA - Not Applicable J - Corneal epithelial damage, peeling K - Corneal epithelial damage, piling L - Corneal epithelial damage, piling C - Clear discharge M - Hypopyon M - Hypopyon N - Corneal neovascularization P - Pannus F - Necrotic Areas R - Unable to visualize due to severe swelling H - No reaction to light POS - Positive stain retention NEG - Negative stain retention	Technician	Sodium Fluore	scein Exam	Pasas 7	Phs1070	Pos 30%	Pos 1570	Pos 70%	POS60%
NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected J - Corneal epithelial damage, piling K - Corneal epithelial damage, piling L - Corneal epithelial damage, piling N - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention	NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected J - Corneal epithelial damage, peeling K - Corneal epithelial damage, piling M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention T - Blood-like discharge H-AFACM								
NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected J - Corneal epithelial damage, pelling K - Corneal epithelial damage, pitting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention	NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected J - Corneal epithelial damage, piling L - Corneal epithelial damage, piling M - Hypopyon N - Corneal epithelial damage, piling M - Hypopyon N - Corneal epithelial damage, piling M - Hypopyon N - Corneal epithelial damage, piling M - Hypopyon N - Corneal epithelial damage, piling M - Hypopyon N - Corneal epithelial damage, piling N - Corneal epithelial damage, piling N - Hypopyon N - Corneal epithelial damage, piling N - Hypopyon S - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention T - Blood-like discharge H-012000					-			
A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected K - Corneal epithelial damage, piling L - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention	A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected K - Corneal epithelial damage, pitting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge H-DL-BOSTA		O F OO	•	•				
B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected L - Corneal epithelial damage, pitting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention	B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected L - Corneal epithelial damage, pitting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge H-DLAGME								
D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention	D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge H- OLEONIC	B - Blan	ching			L - Co	rneal epith	nelial dama	ge, pitting
E - Hair loss around the eye F - Necrotic Areas R - Unable to visualize due to severe opacity severe swelling S - Granulation scar tissue H - No reaction to light POS - Positive stain retention I - Injected NEG - Negative stain retention	E - Hair loss around the eye F - Necrotic Areas R - Unable to visualize due to severe swelling S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge II-DISOM							ascularizat	ion
G - Unable to visualize due to severe opacity severe swelling S - Granulation scar tissue H - No reaction to light POS - Positive stain retention I - Injected NEG - Negative stain retention	G - Unable to visualize due to severe opacity S - Granulation scar tissue H - No reaction to light I - Injected S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge II-01905M	E - Hair	loss arou	nd the eye				suslisa dua	. +0
severe swelling S - Granulation scar tissue H - No reaction to light POS - Positive stain retention I - Injected NEG - Negative stain retention	severe swelling H - No reaction to light I - Injected S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention T - Blood-like discharge 11-31-80576				:0				: 10
I - Injected NEG - Negative stain retention	I - Injected NEG - Negative stain retention T- Blood-like discharge 11-01-80576 ()	seve	re swellin	g					
T-Blood-like discharge 11-04-805Mc /	T-Blood-like discharge 11-21-805Mc /			light					
	eviewed By: One Date: 12-11-R/2 Eye Irritation Score: 35.2					T-Bla	od-like dis	charge 11-245	edsale /(

0	est Materi	al: <u>Samp</u>	lc: I-39	174 Lo-	t 390	HLA	No. 610	05209	
	Test Eye:						p: <u>NA</u>		
		hed: <u>NA</u> secor the t	est eye wa:	ng instilla s washed wi _{/A} seconds.	th <u>NA</u> mL o	st material of lukewarm		Inwashed	
٠,		OBSERVATION PERIOD: 14 days							
	Animal No.		5615	5616	5591	5618	5619	5620	
	Location o Corneal Le	sions							
		Head	I= 15% H	J=5% N	J-590 N	Ц	J=4070H	J=300 N	
	Co.rnea - 0		1			0	3 .	420	
		rea	Ţ	0	^	0	I	R	•
	Iris		_	0	U	10			
	Conjunctiv R	edness	ર	1	0	0	3	_3 E	
		Chemosis	3	ll		0	3	4	
	0)ischarge	.D	0	0		3D	3D	ı
	Sodium Flu	orescein Exam	Pas 15%	Pos 5%	Pos 5%	Neg-	705 40%	Pos 509	,
	Technician	1//				3			
•	NA - Not Applicable A - Petite hemorrhage B - Blanching C - Clear discharge D - Purulent discharge E - Hair loss around the eye F - Necrotic Areas G - Unable to visualize due to severe swelling H - No reaction to light I - Injected J - Corneal epithelial damage, peeling K - Corneal epithelial damage, piling L - Corneal epithelial damage, piling M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention								
0	eviewed By	y: ① ENTRY err ② DUE TO ONE A	THE INA! NIMAL (sinc sility to F15620),	0.10-86 Score TH this Sco Slu 12-	E IRIS OF	itation Sco	2018 re: 2018 slu 124	

est Material: Test Eye: <u>Righ</u>	•	lc: T-3°	174 Lc-	- 390		No. <u>(a)0</u> 0	05209		
<u>NA</u> Washed:	' the t	est eye wa:	ng instilla s washed wi <u>IA</u> seconds.	th <u>NA</u> ML o	st material of lukewarm		Inwashed		
	OBSERVAT			ION PERIOD: 21 days					
Animal No.	FI-	5615	5616	5591	5618	5/019	5620		
Location of Corneal Lesion			**						
Tail		100	5-59 NS	1	0	5-2590NS	5-1010 NS		
Cornea - Opac Area	Ly .	100		1	0	1			
Iris		0	0	0	0	Ó	0	•	
Conjunctivae									
Redn		,		0	0	2	1		
Ch em		2	2	0	0	3	3	•	
	harge	۱۲	0	0	0	30	2D	-	
Sodium Fluore		Nea.	Pos 5%	Nea	Nea.	Pos 25%	POS 10%		
Technician_									
A - Peti B - Blan C - Clea D - Puru E - Hair F - Necr G - Unab seve	r discharg lent disch loss arou otic Areas le to visu ere swellin eaction to	age e arge nd the eye alize due t g	:0	J - Corneal epithelial damage, peeling K - Corneal epithelial damage, piling L - Corneal epithelial damage, pitting M - Hypopyon N - Corneal neovascularization P - Pannus R - Unable to visualize due to severe opacity S - Granulation scar tissue POS - Positive stain retention NEG - Negative stain retention D-10-ELo Eye Irritation Score:					
.eviewed By: _ (4253A)	Janton.	errors			> Eye Irr	itation Sco	re: <u>115</u> Lu 12-8	<u>s</u>	