



WARF INSTITUTE, INC.

MADISON, WISCONSIN

AT-3

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REPORT

AR226-0127

Sample: T-1166

WARF No. 5011023

Date Received: 1-13-75

Submitted by:

J. E. Long
3M Company
St. Paul, Minnesota

Testing requested:

Skin Irritation
Eye Irritation

Conclusion:

Under the conditions specified the product has a primary skin irritation score of zero and eye irritation scores of 23.67, 23.67, 21.67, 13.50 and 3.33 at 1, 24, 48, 72 hours and seven days respectively for unwashed eyes.

The product is not irritating to the skin and is irritating to the eye.

Signed

By and for WARF Institute, Inc.

Report approved by:

Date: January 28, 1975

Donald L. Harris, D.V.M.
Chief Pathologist/Toxicologist

001785

WARF INSTITUTE, INC.

MADISON, WISCONSIN

Sample: T-1166

WARF No. 5011023

Primary Skin Irritation:

Method: Albino rabbits were used for this work. They were housed in individual screen bottom cages and fed water and rabbit chow ad libitum. The hair was clipped from the back and flanks of the animal. Five tenths of one milliliter of test material was placed in intimate contact with the skin on prepared test sites (abraded and intact), and covered with gauze patch and tape to maintain contact with the skin. After a 24 hour contact period, the coverings were removed and the degree of erythema and edema was recorded according to the scale below. Readings were taken again at 72 hours and the 24 and 72 hour readings used to determine the primary skin irritation score.

Results:

Animal Number	24 Hours		72 Hours		Average
	<u>Abraded</u>	<u>Unabraded</u>	<u>Abraded</u>	<u>Unabraded</u>	
1					
2					
3					
4					
5					
6					

no noted irritation
all sites read negative

Primary skin irritation score: 0

Scale for Evaluation of Skin Reaction

<u>Erythema and Eschar Formation</u>	<u>Score</u>	<u>Edema Formation</u>	<u>Score</u>
Slight erythema	1	Slight edema (barely perceptible)	1
Defined erythema	2	Defined edema (edges definite rising)	2
Moderate to severe erythema	3	Moderate edema (area raised 1 mm)	3
Severe erythema to slight eschar formation	4	Severe edema (raised more than 1 mm)	4

Score equals sum of erythema and edema readings.

Skin irritation index equals average of 24 and 72 hour scores.

001786

WARF INSTITUTE, INC.
MADISON, WISCONSIN

Sample: T-1166

WARF No. 5011023

Eye Irritation:

Method: Adult albino rabbits of the New Zealand White variety were placed in a collar such that the animals could not rub their eyes. One-tenth of a milliliter (0.1 gm for solids) of test substance was instilled in one eye, the other untreated eye served as a control. A series of six albino rabbits was used for each substance. The reaction to the test material was read according to the scale of scoring for damage to the cornea, iris and the bulbar and palpebral conjunctivae at 1, 24, 48, 72 hours and seven days after eye instillation. Any residue of the test material and accumulated discharge are flushed from the eye each time they are scored.

Administration:

Concentration of test sample: as submitted

Diluent or solvent: none

Special washing: none

Results:

	Rabbit Number	Cornea		Iris	Conjunctivae		
		Opacity	Area		Redness	Chemosis	Discharge
1 hour	1	1	4	0	2	2	2
	2	1	2	0	2	2	1
	3	1	2	0	2	2	2
	4	1	2	0	2	3	2
	5	0	0	0	2	2	2
	6	2	2	0	2	2	2
1 hour eye irritation score:					23.67		
24 hours	1	1	4	0	2	2	2
	2	1	2	0	2	2	2
	3	1	2	0	2	2	2
	4	1	2	0	2	2	2
	5	0	0	0	2	2	2
	6	2	2	0	2	2	2
24 hour eye irritation score:					23.67		
48 hours	1	1	4	0	2	1	1
	2	1	2	0	2	1	1
	3	1	2	0	2	1	2
	4	2	2	0	2	1	1
	5	0	0	0	2	1	1
	6	2	2	0	2	1	1
48 hour eye irritation score:					21.67		

001787

WARF INSTITUTE, INC.
MADISON, WISCONSIN

Sample: T-1166

WARF No. 5011023

Eye Irritation: (continued)

Results:

	Rabbit Number	Cornea		Iris	Conjunctivae		
		Opacity	Area		Redness	Chemosis	Discharge
72 hours	1	1	2	0	2	0	0
	2	1	2	0	2	0	0
	3	1	1	0	2	0	1
	4	1	2	0	2	0	0
	5	0	0	0	2	0	0
	6	2	2	0	2	0	0

72 hour eye irritation score: 13.50

7 days	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	0	0	0	2	1	2
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
	6	1	2	0	0	0	0

7 day eye irritation score: 3.33

001788



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REPORT

Sample: T-1166

WARF No. 5011023

Date Received: 1-13-75

Submitted by:

J. E. Long
3M Company
St. Paul, Minnesota

Testing requested:

Eye Irritation

Conclusion:

Under the conditions specified the product has eye irritation scores of 7.33, 6.67, 6.00, 2.67 and zero at 1, 24, 48, 72 hours and seven days respectively for eyes washed after a five second exposure and eye irritation scores of 8.67, 11.33, 7.33, 4.67 and zero at 1, 24, 48, 72 hours and seven days respectively for eyes washed after a 30 second exposure.

The product is irritating to the eye.

Signed

By and for WARF Institute, Inc.

Report approved by:

Date: January 28, 1975

Donald L. Harris, D.V.M.
Chief Pathologist/Toxicologist

001789

WARF INSTITUTE, INC.

MADISON, WISCONSIN

Sample: T-1166

WARF No. 5011023

Eye Irritation:

Method: Adult albino rabbits of the New Zealand White variety were placed in a collar such that the animals could not rub their eyes. One-tenth of a milliliter (0.1 gm for solids) of test substance was instilled in one eye, the other untreated eye served as a control. A series of three albino rabbits was used for each substance. The reaction to the test material was read according to the scale of scoring for damage to the cornea, iris and the bulbar and palpebral conjunctivae at 1, 24, 48, 72 hours and seven days after eye instillation. Any residue of the test material and accumulated discharge are flushed from the eye each time they are scored.

Administration:

Concentration of test sample: as submitted

Diluent or solvent: none

Special washing: eyes washed with 300 ml. of distilled water over a two minute period, after a five second exposure.

Results:

	Rabbit Number	Cornea		Iris	Conjunctivae		
		Opacity	Area		Redness	Chemosis	Discharge
1 hour	1	0	0	0	1	0	1
	2	0	0	0	1	2	1
	3	0	0	0	2	2	1
1 hour eye irritation score: 7.33							
24 hours	1	0	0	0	2	0	0
	2	0	0	0	2	1	1
	3	0	0	0	2	1	1
24 hour eye irritation score: 6.67							
48 hours	1	0	0	0	2	0	1
	2	0	0	0	2	1	0
	3	0	0	0	2	1	0
48 hour eye irritation score: 6.00							
72 hours	1	0	0	0	2	0	0
	2	0	0	0	1	0	0
	3	0	0	0	1	0	0

72 hour eye irritation score: 2.67

001790

 WARF INSTITUTE, INC.
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Sample: T-1166

WARF No. 5011023

Eye Irritation: (continued)

Results:

<u>Rabbit</u> <u>Number</u>	<u>Cornea</u>		<u>Iris</u>	<u>Conjunctivae</u>		
	<u>Opacity</u>	<u>Area</u>		<u>Redness</u>	<u>Chemosis</u>	<u>Discharge</u>
1						
2						
3						

no noted irritation
all readings negative

7 day eye irritation score: 0

001791

WARF INSTITUTE, INC.
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Sample: T-1166

WARF No. 5011023

Eye Irritation:

Method: Adult albino rabbits of the New Zealand White variety were placed in a collar such that the animals could not rub their eyes. One-tenth of a milliliter (0.1 gm for solids) of test substance was instilled in one eye, the other untreated eye served as a control. A series of three albino rabbits was used for each substance. The reaction to the test material was read according to the scale of scoring for damage to the cornea, iris and the bulbar and palpebral conjunctivae at 1, 24, 48, 72 hours and seven days after eye instillation. Any residue of the test material and accumulated discharge are flushed from the eye each time they are scored.

Administration:

Concentration of test sample: as submitted

Diluent or solvent: none

Special washing: eyes washed with 300 ml. of distilled water over a two minute period, after a 30 second exposure.

Results:

	Rabbit Number	Cornea		Iris	Conjunctivae		
		Opacity	Area		Redness	Chemosis	Discharge
1 hour	1	0	0	0	1	2	1
	2	0	0	0	1	2	1
	3	0	0	0	2	2	1
1 hour eye irritation score:					8.67		
24 hours	1	0	0	0	2	1	1
	2	0	0	0	2	2	2
	3	0	0	0	3	2	2
24 hour eye irritation score:					11.33		
48 hours	1	0	0	0	2	1	0
	2	0	0	0	2	1	0
	3	0	0	0	3	1	1
48 hour eye irritation score:					7.33		
72 hours	1	0	0	0	2	0	0
	2	0	0	0	2	0	0
	3	0	0	0	2	1	0
72 hour eye irritation score:					4.67		

001792

 WARF INSTITUTE, INC.
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Sample: T-1166

WARF No. 5011023

Eye Irritation: (continued)

Results:

	<u>Rabbit Number</u>	<u>Cornea</u>		<u>Iris</u>	<u>Conjunctivae</u>		
		<u>Opacity</u>	<u>Area</u>		<u>Redness</u>	<u>Chemosis</u>	<u>Discharge</u>
	1						
7	2						
days	3						

no noted irritation
all readings negative

7 day eye irritation score: 0

001793