FIRE Retardants Inc.™
The Decision You Make May Save A Life!
123 Columbia Court North • Suite 201 • Chaska, MN 55318
952-448-7377 • FAX: 952-448-2613
Fire Retardant "HOT LINE" 1-800-913-9385
e-mail: info@fireretardantsinc.com
Visit Our Web Site at www.fireretardantsinc.com

EST. 1860

United States Testing Company, Inc.

Biological Services Division

1415 Park Avenue • Hoboken, New Jersey 07030 • 201-792-2400

REPORT OF TESTING

LA-62806
NUMBER
August 6, 1973

SUBJECT: Two (2) samples were submitted by the Client and identified as:

Fire Retardant solution BURN BARRIER™ FPC
Blue coated, cotton fabric, containing BURN BARRIER™ FPC

Projects:

Acute Oral, Toxicity, Single Dose (solution)
Skin Irritation, Draize (solution).
Skin Irritation, Draize (coated fabric)

Procedure:

Acute Oral Toxicity (Single Dosage)

The test was conducted in accordance with the procedures of the Federal Hazardous Substances Labeling Act as outlined in the Code of Federal Regulations Title 21, Chapter I, paragraph 191.1.

Ten (10) M.F.S. rats (5 males, 5 females) each. weighing between 200 & 300 grams were selected for testing. The animals were individually housed in wire mesh cages with raised floors in a conditioned animal room. The animals were maintained on a commercial rat food diet with water available ad libitium.

Prior to testing, the animals were fasted for sixteen (16) hours, weighed and identified.

California Division
United States Testing Company, Inc.
5521 Telegraph Road
Los Angeles, California 90022
Phone: 213-723-7181 • 213-722-0608

SIGNED FOR THE COMPANY

B.S. Givon, V.P.

BY E. Rider

Pg, 1 6
ml

Procedure (continued)

The dosage to be administered was calculated based on the animals' weight. The sample was then fed to the unanesthetized animals by direct stomach intubation using a 16 gauge "Ball Point" needle. The animals were then returned to their individual cages for observation of overt toxicological effects immediately after administration of the sample, after one hour, after four hours, and once-daily thereafter for a period of fourteen days.

Results:

Sample	Total Dosage per Kg. of Body Weight	Mortality Ratio
Fire Retardant Solution BURN BARRIER™ FPC	5g/kg	0/10

Conclusion:

The test was performed as specified and found not to be a "toxic substance" as defined by the Federal Hazardous Substances Labeling Act.

Project:

Primary Skin Irritation Test (Rabbits).

Procedure:

The test was conducted in accordance with the procedures outlined in the Association of Food and Drug Officials of the United States, Appraisal of the Safety of Chemicals in Food Drug and Cosmetics Dermal Toxicity, J. H. Draize, Ph. D., pgs. 46-59.

Six (6) New Zealand Strain Albino rabbits were selected for the test.The hair was clipped from the back and flank of the animal. Patches 2.5 cm x 2.5 cm were applied to the abraded and unabraded area of the skin by using thin bands of adhesive tape. (Each patch was moistened with distilled water to facilitate absorption of soluble materials by the skin.)

The entire trunk of the rabbits was then wrapped with rubberized cloth to hold the patches in position and to retard evaporation of any volatile substances during the 24 hour exposure period. Upon removal of the patches the resulting skin reactions were evaluated. Readings were also taken after 72 hours. The primary irritation score is derived by addition of each individual score and dividing the total score by 4. For the evaluation the following rating scale was used.

Compounds producing combined averages (Primary Irritation Indexes) of 2 or less are only mildly irritating, whereas those with indices from 2-5 are moderate irritants and those above 6 are considered severe irritants. Those compounds producing combined averages of 0.0 are non-irritating.

The combined averages of primary irritation indexes are evaluated on the basis of a scale of weighted scores as follows:

A. Erthema and Eschar Formation

No erythema 0
Very slight erythema (barely perceptible) 1
Well defined erythema 2
Moderate to severe erythema 3
Severe erythema (beet redness) to slight eschar formation (injuries in depth) 4
Total possible erythema score 4

B Edema Formation

No edema 0
Very slight edema (barely perceptible) 1
Slight edema (edges of area well defined by, definite raising 2
Moderate edema (area raised approximately 1 mm) 3
Severe edema (raised more than 1 mm and extending beyond area of exposure) 4
Total possible erythema score 4
Total possible score for primary irritation 8

Results

Sample	Erthema & Eschar	Period	Animal 1	2	3	4	5	6	Avg.
Blue - Coated Cotton Fabric	abraded skin	24 hrs.	0	0	0	0	0	1	.17
	abraded skin	72 hrs.	0	0	0	0	0	0	0.0
	unabraded skin	24 hrs.	0	0	0	0	0	0	0.0
	unabraded skin	72 hrs.	0	0	0	0	0	0	0.0
	Edema								
	abraded skin	24 hrs.	0	0	0	0	0	0	0.0
	abraded skin	72 hrs.	0	0	0	0	0	0	0.0
	unabraded skin	24 hrs.	0	0	0	0	0	0	0.0
	unabraded skin	72 hrs.	0	0	0	0	0	0	0.0
								Total	.17
		Primary Irritation Score (Total + 4)							.04

Conclusion:

The test was performed as specified and the sample found to be “mildly irritating”. It should be noted that this irritation score is extremely low.

Procedure:

Portions of 0.5 mis of the submitted sample were introduced onto the abraded and unabraded areas of the skin.

Results:

Sample	Erthema & Eschar	Period	Animal 1	2	3	4	5	6	Avg.
Fire-Retardant Solution BURN BARRIER™ FPC	abraded skin	24 hrs.	1	1	1	1	1	1	1.0
	abraded skin	72 hrs.	1	0	1	0	0	1	.5
	unabraded skin	24 hrs.	1	1	1	1	1	1	1.0
	unabraded skin	72 hrs.	1	0	1	0	0	1	.5
	Edema								
	abraded skin	24 hrs.	0	1	2	0	2	2	1.0
	abraded skin	72 hrs.	0	0	1	0	1	0	0.3
	unabraded skin	24 hrs.	0	1	0	0	2	0	0.5
	unabraded skin	72 hrs.	0	0	0	0	0	0	0.0
								Total	4.8
		Primary Irritation Score (Total + 4)							1.2

Conclusion:

The test was performed as specified and the sample found to be “mildly irritating”.