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E. I. du Pont de Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine
HASKELL LABORATORY REPORT NO. 275-73 [REDACTED]

Material Tested [REDACTED]

Haskell No.

Other Codes [REDACTED]

Submitted by [REDACTED]

7943

Organic Chemicals Department

PRIMARY SKIN IRRITATION AND SENSITIZATION TESTS ON GUINEA PIGS

Procedure: The test for primary irritation was conducted by applying, and lightly rubbing in, one drop (~ 0.1 ml) of a 50% and 25% solution (wt/vol) of the test material in distilled water on the shaved intact shoulder skin of 10 male albino guinea pigs. A second set of 10 guinea pigs was treated in the same manner using a 5% and 1% concentration in distilled water. To test for the sensitization potential, a series of four sacral intradermal injections was given, one each week over a three week period, which consisted of 0.1 ml of a 1.0% solution (wt/vol) of test material in distilled water. Following a two-week rest period, the second group of animals, initially treated at 5% and 1% concentrations, were challenged for sensitization by applying, and lightly rubbing in, one drop (~ 0.05 ml) of a 5% and 1% solution (wt/vol) of test material in distilled water on the shaved intact shoulder skin. A group of 10 previously unexposed guinea pigs received similar applications at the time of challenge to provide a direct comparison of the challenge reactions on skin of similar age.

Results

Reactions* on Intact Guinea Pig Skin

	Test Areas				Control Areas for Challenge Test	
	(1st Grp: 10 Animals - In. Avg. Wt. = 462 g 2nd Grp: 10 Animals - In. Avg. Wt. = 468 g Final Avg. Wt. = 683 g)				(10 New Animals - Average Weight = 677 g)	
	First Group		Second Group			
Concentration in distilled water	50%	25%	5%	1%	5%	1%
Primary Irritation Test						
24 Hours	7++, 3+	2++, 6+, 2 neg.	10 neg.	10 neg.		
48 Hours	10++++	5++++, 1++, 4+	10 neg.	10 neg.		
Challenge Test						
24 Hours			1+, 9 neg.	2+, 8 neg.	1+, 9 neg.	3+, 7 neg.
48 Hours			1+, 9 neg.	2+, 8 neg.	1+, 9 neg.	1+, 9 neg.
Number of animals sensitized**			0/10			

Summary: [REDACTED] produced mild to strong irritation with edema when tested on guinea pig skin at 50% and 25% concentrations in distilled water, however at 5% and 1% concentrations, it produced mild irritation. No sensitization was observed on any of the test animals. Care should be exercised when handling solutions of this material and any contacting the skin should be promptly washed off with water.

* Reaction Code: +, ++, +++ = mild, moderate, strong erythema; ++++ = erythema plus edema; +++++ = necrosis.

** Sensitization is defined as a two-step score increase (++) at challenge over the response expected from the same amount applied initially or on the concurrent controls.

Report by: _____

O. Louis Dashiell

Approved by: _____

Charles F. Reinhardt
Assistant Director

OLD:pgh
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