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DATA EVALUATION REPORT

STUDY TYPE: Primary Dermal Irritation - rabbit (81-5)

TOX. CHEM. NO.: 510A

ACCESSION NUMBER/MRID NO.: 410137-06

TEST MATERIAL: Chlorpropham Technical (SX-1817)

STUDY NUMBER(S): CEHC 2996

LABORATORY PROJECT I.D.: S-3176

SPONSOR: Chevron Chemical Company, Ortho Agricultural Chemicals Division, 15049 San Pablo Avenue, Richmond, California

TESTING FACILITY: Chevron Environmental Health Center, Inc., 15299 San Pablo Avenue, Richmond, California

TITLE OF REPORT: The Four-Hour Skin Irritation Potential of Chlorpropham Technical (SX-1817) in Adult Albino Rabbits

AUTHOR(S): K.K. Dougherty

REPORT ISSUED: January 26, 1989

CONCLUSION: Technical Chlorpropham was tested in a primary dermal irritation study in rabbits. One-half gram was tested on each rabbit, abraded and unabraded. The primary dermal irritation score was 0.3. The test material is considered to be minimally irritating.

Toxicity Category: IV

Classification: Core Guideline

A. MATERIALS AND METHODS:

1. Test Compound(s):

Chemical Name: 1-methylethyl 3-chlorocarbanilate

Description: micronized white powder
Batch #(s), Other #(s): SX-1817
Purity: 99.9%
Source: Chevron Chemical Company
Vehicle (if applicable): Physiological saline

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2. Test Animals:

Species and Strain (sexes): Young adult New Zealand White rabbits

Age: 15-17 weeks
Weight(s): Not given
Source(s): R and R Rabbitry, Stanwood, Washington

3. Procedure:

a. Preparation of Animals and Dosing Mixtures: The test material was mixed 1:1 with physiological saline prior to dosing. The fur on the trunks of 6 animals was clipped the day before dosing. One-half gram of the test material was applied to two test sites/animal, one intact and one abraded. One-half milliliter of physiological saline was added to each treated site by syringe after application of the test material to insure better contact with the skin. The test sites were then covered with gauze patches secured by porous tape. The trunk of each animal was then wrapped with a sheet of plastic film and paper toweling. The animals were fitted with plastic collars. After a 4 hour exposure period, the wrappings and collars were removed and the remaining test material was wiped off using gauze pads and mineral oil. The skin at the application site was scored for irritation at 1, 24, 48 and 72 hours, and at 7 and 14 days after treatment using the Draize method.

b. Gross Necropsy: An external examination was conducted on all animals.

c. Histopathology: Sections of skin sites with irritation or injury persisting to day 14 were collected and preserved for possible microscopic examination.

B. RESULTS:

1. Skin Irritation: The Primary Irritation Score (PIS) for the test material was 0.3. The test material caused slight erythema with no edema through day 7 (one animal on day 7 had minimal erythema). The erythema had completely disappeared by 72 hours in all animals but reappeared in one animal on day 7. Dry and flaky skin appeared on all animals at day 7 and was observed on both intact and abraded skin. By day 14, only 2 animals had this condition.

2. Gross Pathology: As stated above, dry and flaky areas were observed in 2 animals.

3. Histopathology: Hyperkeratosis was observed in the treated skins of 2 animals. This was considered by the Pathologist to be related to treatment and is indicative of mild dermal irritation.

4. Quality Assurance Measures: Signed Good Laboratory Practice Statement and Quality Assurance Statements were provided.

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C. DISCUSSION: The primary dermal irritation score was 0.3, the test material is considered to be minimally irritating, the study is Core Guideline and the toxicity category is IV.