CASWELL FILE
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DATA EVALUATION REPORT

STUDY TYPE: Primary dermal irritation -rabbits

TOX. CHEM. NO.: 663-P MRID NO.: 412906-25

GUIDELINE NO.: 81-5

TEST MATERIAL: DPX-43898-26 (brown solid granule)

SYNONYMS: FORTRESS 5G

STUDY NUMBERS: HLR 732-88

SPONSOR: E.I.duPONT de NEMOURS and CO.,INC.
WILMINGTON, DELAWARE

TESTING FACILITY: HASKELL LABORATORY for TOXICOLOGY and INDUSTRIAL MEDICINE
NEWARK, DELAWARE

TITLE of REPORT: PRIMARY DERMAL IRRITATION STUDY WITH DPX-43898-26 in RABBITS

AUTHOR: WILLIAM J. BROCK

STUDY DATES: OCTOBER 11, 1988 to OCTOBER 14, 1988

REPORT ISSUED: NOVEMBER 4, 1988

CONCLUSION: DPX- 43898-26 was not found to be a skin irritant when administered to six New Zealand White rabbits (2 male, 4 female).

Toxicity Category: IV

Classification: Supplementary (Refer to the Discussion section of the DER for additional information)

MATERIALS: Six New Zealand White rabbits weighing from 2796 to 3168 grams were the test species. A 0.5 gram aliquot of DPX-43898-26 (5.3% purity by analysis), moistened with dimethyl phthalate, was the test material.

METHODS: The hair of 6 rabbits was clipped to expose the skin from the scapular to the lumbar region of the back. A 0.5 gram aliquot of DPX-43898-26 was moistened with dimethyl phthalate and applied directly to a 2-inch gauze square then placed on the skin. The patch was held in place with tape and rubber sheeting was wrapped around the animal and secured with clips to retard

evaporation of the test material while keeping it in contact with the skin.

After approximately 4 hours post-treatment the rubber sheeting was loosened and the skin was marked at the corner of the gauze squares with a waterproof pen. Wrapping and gauze were then removed and the treated skin was washed with warm water and wiped dry. The test area was evaluated for erythema, edema and other evidence of dermal effects. Evaluations were made when the patch was removed and at 24, 48 and 72 hours thereafter. Adjacent areas of untreated skin were used for comparison.

Primary irritation indices were calculated by adding the erythema scores at 24 and 72 hours to the edema scores at the same intervals. The sum of these two scores was then divided by 2. Compounds with primary irritation indices greater than 5 are considered to be primary skin irritants.

Animals were maintained in stainless steel, wire mesh cages. The rooms in which the animals were kept were controlled so that there was a 12 hour light/ 12 hour dark cycle. The temperature and relative humidity were maintained at 20°C ± 2°C and 50 % ± 10%, respectively.

QUALITY ASSURANCE: A signed quality assurance statement dated 10/10/88 was included in the submission. A statement of compliance with Good Laboratory Practices, dated 11/21/88 was also provided.

RESULTS: DPX-43898-26 produced no dermal irritation and the Draize scores for erythema and edema were zero for both parameters at each evaluation interval.

A red discharge in the perineal area was observed in two rabbits, but the sponsor concluded that this observation was related to the method used to restrain the animals and not attributed to the test material.

DISCUSSION: The study was conducted in accordance with Subdivision F Guideline 81-5 for primary dermal irritation. The data demonstrate that DPX-43898-26 is not a primary skin irritant when administered under the conditions of this study; however, the sponsor has not provided information on the vehicle used in the study. There is a concern that the vehicle, dimethyl phthalate, a plasticizer, may block or inhibit potential absorbtion of the test material.

Results from this study suggest that there may have been dermal absorption of the test material. The appearance of a red perineal discharge in two of the rabbits should be noted, given the fact that staining of the perineum was observed in the acute oral toxicity study in rats. The sponsor has not provided any additional information on the onset and duration which would support their conclusion that the observed discharge was, in fact, caused by restraint methods. This observation does not affect the conclusion that the test material was not a primary

dermal irritant under conditions of the study with the vehicle used.

The study is classified as supplementary. Additional information on the vehicle would be required to upgrade the study.