

US EPA ARCHIVE DOCUMENT

Pebulate

4/13/1999

Supplement to DER, MRID 41920701 - Repeated Dose Dermal Toxicity in Rats
This supplement provides an executive summary to upgrade the original DER

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AMENDED DATA EVALUATION RECORD

STUDY TYPE: 21-Day Dermal Toxicity

DP BARCODE: D166879

PC CODE: 041403

CASWELL No.: 710

TEST MATERIAL (PURITY): Pebulate (97.1%)

SYNONYMS: Tillam

SPONSOR: ICI Agrochemicals

CITATION: Kinsey, DL and Leah, AM (1990) Pebulate: 21-day Dermal Toxicity to the Rat. ICI Central Toxicology Laboratory, England. Report No. CTL/P/3096. December 3, 1990. MRID 41920701. Unpublished.

SUBMISSION No.: S400055

CASE No.: 2500

EXECUTIVE SUMMARY: In a 21-day dermal toxicity study (MRID 41920701), SPF Wistar-derived albino rats (5/sex/group) received 6-hour dermal application of pebulate (97.1%) at dose levels of 1, 10, or 100 mg/kg/day for 21 days (5 applications per week). No treatment related mortality was observed. Treatment-related clinical observation included: (1) Slight or moderate erythema and edema in the mid- and high-dose males and females; (2) desquamation, skin sensitive to touch and thickening of the skin in the high-dose males and females; and (3) upward curvature of spine mostly in the high-dose females. Significant body weight gain deficits ($\downarrow 28.7\%$) and reduction of food utilization ($\downarrow 29\%$) were observed in the high-dose females only. Hematology showed a 48% reduction in neutrophils count in the high-dose females compared to the control. There were dose-related increases in absolute and relative adrenal weights of males and females, but statistical significance was reached only in the high-dose females. **For dermal irritation, the NOAEL was established at 1 mg/kg/day (both sexes) and the LOAEL was 10 mg/kg/day based on erythema and edema. For systemic toxicity, the NOAEL was established at 10 mg/kg/day for females and 100 mg/kg/day (HDT) for males, the LOAEL for females was 100 mg/kg/day based on decreased body weight gain and food utilization, reduction in neutrophils and increased adrenal/body weight ratio.**

This study is classified **Acceptable (Guideline)** and satisfies guideline requirement for a 21-day dermal toxicity study in rats (82-2).

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