

US EPA ARCHIVE DOCUMENT

CASE

002647^{PM}

CHEM Chlorsulfuron

BRANCH TB DISC TOPIC Acute Dermal LD₅₀ - Rabbits

FORMULATION Technical

002647

FICHE/MASTER ID

CONTENT CAT

Acute Skin Absorption Test On Rabbits - LD₅₀, Haskell
Laboratory Report No. 415-79, Edwards, D. F.

SUBST. CLASS =

OTHER SUBJECT DESCRIPTORS

DIRECT RVW TIME = 1 1/4 hours

START-DATE

END DATE

REVIEWED BY: J. C. Summers

TITLE: Research Associate

ORG: E. I. du Pont de Nemours & Co., Inc., Biochemicals Departme

LOC/TEL: Wilmington, Delaware / (302) 772-2367

SIGNATURE: *J. C. Summers*

DATE: November 6, 1979

APPROVED BY:

TITLE:

ORG:

LOC/TEL:

SIGNATURE:

DATE:

Conclusion:

- A. Core minimum (Only two close levels tested).
- B. Category III
- C. Dermal LD₅₀ is greater than >3400 mg/kg for technical chlorsulfuron on rabbits.
- D. This study generally conforms to EPA Proposed Guidelines in section 163.81-2 Acute Dermal Toxicity Study (43 Federal Register 37356, 8/22/78) with some modifications.

Methods:

Fifteen adult male and ten adult female albino rabbits were clipped free of hair over the back and trunk area and fitted with plastic collars. The test material was applied to abraded skin on the back of each animal under gauze pads. The animals trunk was then wrapped. After a 24-hour exposure period, the wrappings were removed and the treated site was washed with water and dried. Surviving animals were sacrificed at 14 days. Four male and two female rabbits underwent gross examination.

Results:

When chlorsulfuron was tested on the abraded skin of five male rabbits at a dose rate of 2000 mg/kg, one rabbit was found dead five days after treatment. No clinical signs were seen in this rabbit at any time. The death did not appear to be compound related; however, ten more male rabbits and ten female rabbits were treated at the higher dose rate of 3400 mg/kg. No clinical signs or deaths were seen.

The LD₅₀ for chlorsulfuron for male and female rabbits by skin absorption (abraded skin) is greater than 3400 mg/kg.

Discussion:

The methods, scientific principles, validity of conclusions, and adequacy of data for conclusions were adequate for the study. Variations from the guideline such as no untreated control, gross pathology on only some of the rabbits, and no dermal histological examination do not affect the validity of the study since they have no direct bearing on the LD₅₀ value.