CHEM Chlorsulfuron

002645

BRANCH TB

DISC

TOPIC Intraperitoneal LD₅₀ - Rats

DATE: ference (1,1951

FORMULATION Technical

FICHE/MASTER ID

CONTENT CAT

Intraperitoneal LD $_{\rm 50}$ Test, Haskell Laboratory Report No. 403-79, Hinckle, L.

SUBST. CLASS =

OTHER SUBJECT DESCRIPTORS

DIRECT RVW TIME = 30 minutes START-DATE END DATE

REVIEWED BY: J. C. Summers

TITLE: Research Associate

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

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

J. E Jummers

APPROVED BY:

SIGNATURE:

TITLE:

ORG:

LOC/TEL:

SIGNATURE: DATE:

Discussion:

A. Core Supplementary (Route of administration - no protocol).

B. Category not assigned.

C. Technical chlorsulfuron administered intraperitoneally to male rats has an LD50 of 1450 mg/kg.

D. This study provides supplemental information and is not needed to satisfy EPA Proposed Guidelines.

Methods:

The test material, as a suspension in corn oil, was administered by intraperitoneal injection to four groups of ten young adult ChR-CD male rats in single doses of 1200, 1400, 1600, 2500 mg/kg. The surviving animals were weighed and observed during a 14-day recovery period and then sacrificed. The LD₅₀ value was calculated using the method of D. J. Finney, Probit Analysis, 3rd Edition, 1971, Cambridge University Press. One or two surviving animals from each group were sent to Pathology for gross examination.

Results:

Chlorsulfuron is slightly toxic when administered by intraperitoneal injection to young adult ChR-CD male rats in single injections; its LD₅₀ is 1450 mg/kg of body weight. One, two, nine, and ten mortalities occurred at 1200, 1400, 1600, and 2500 mg/kg, respectively. Gross pathological observations showed that due to the intraperitoneal administration, compound was found throughout organ surfaces. Adhesions were seen in the liver and diaphragm at most dose levels. Thymal lymph nodes were slightly enlarged and lungs hyperinflated at the 1200 mg/kg dose level.

Discussion:

The methods, scientific principles, validity of conclusions, and adequacy of data for conclusions were adequate for the study.