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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

003797

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM:

TO: Henry Jacoby, PM # 21
Herbicides/Fungicides Branch
Registration Division TS-767C

THRU: R. Bruce Jaeger, Section Head
Rev. Sec. # 1/Toxicology Branch
Hazard Evaluation Division TS-769C

FROM: David L. Ritter, Toxicologist
Rev. Sec. # 1/Toxicology Branch
Hazard Evaluation Division TS-769C

Subject: EPA Reg. # 677-313 - Review of miscellaneous Toxicity Data.

Caswell #: 215B

Sponsor: SDS Biotech. (Formerly Diamond Shamrock Corp., Cleveland, OH.)

This Rat Teratology Study, # 517-5TX-0011-003, is reviewed under the attached DER.

We find that the study is acceptable for regulatory purposes.

DATA EVALUATION REPORT

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STUDY: Teratology Study in Rats EPA # 677-313

LABORATORY: WIL Research Laboratories

DATE: 5/13/83

STUDY NUMBER: # 517-5TX-0011-003

ACCESSION NUMBER: 250855

MATERIAL TESTED: Technical Chlorothalonil

ANIMALS: Sprague-Dawley gravid female rats

METHODS:

"Groups of Sprague-Dawley rats (25 females/group) were administered chlorothalonil orally, via gavage, doses of 0, 25, 100 and 400 mg/kg/day from day 6 through 15 of gestation. Surviving females were necropsied on day 20 and fetuses delivered by hysterotomy. The number and position of viable/nonviable fetuses, early/later resorptions, mean number of corpora lutea and total number of implantations were recorded. External, internal and skeletal examinations of fetuses were performed for evidence of abnormalities and anomalies. Half of the fetuses were evaluated for soft tissue anomalies and the other half for skeletal effects.

[RESULTS]:

There was no dose related mortality in the 25 and 100 mg/kg/day groups. However, three dams in the 400 mg/kg which died during treatment were considered related to compound ingestion. There were no abortions in any group. General appearance and behavior were unremarkable except for evidence of cathartic action at 400 mg/kg (e.g. loose feces, matting of urogenital fur). Mean maternal body weights were significantly different (less) than control at the high dose. Food consumption was significantly reduced in all treatment groups initially (days 6-9), and in the high dose group throughout the dosing period (days 6-15). There were no differences compared to control for mean number of viable fetuses, implantation sites, corpora lutea or fetal weights. There was a significant increase in the number of early resorptions in the high dose group, as well as post implantation losses, when compared to controls. There were no reported effects on number or percentage of fetuses/litters with external, internal or skeletal malformations or developmental variations at any dose level administered.

[CONCLUSION]:

Chlorothalonil was considered maternally toxic to rats at 400 mg/kg but there was no evidence of teratogenicity at any level tested (Rodwell et al., 1983)."

CORE RATING:

Guideline.

REFERENCE

Jaeger, R.B. "The Toxicity of Chlorothalonil". Report to the Joint Committee on Pesticide Residues. FAO/WHO. Geneva. 1983. (Draft).

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