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UNDATED

DER #7a

Malathion: Range-Finding Developmental Toxicity Study in Rabbits. Food and Drug Research Laboratories. 1985. MRID 00152569. HED Doc. No. 007376.



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Malathion: Range-Finding Developmental Toxicity Study in Rabbits. Food and Drug Research Laboratories. 1985. MRID 00152569. HED Doc No. 007376.

*Replaced w/ Sue's response  
memo which  
addresses both  
RF & main  
study data*

## DATA EVALUATION RECORD

Study Type: Range-Finding Developmental Toxicity Study,  
Rabbits (OPP Guideline 83-3)

P.C. Code: 057701

Tox. Chemical No.: 535

Test Material (purity): Malathion; (92.4% a.i.)

Synonyms O,O-dimethyl dithiophosphate of diethyl mercaptosuccinate; O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate; diethyl mercaptosuccinate, S-ester with O,O-dimethyl phosphorodithioate; Cythion; AC6,601.

Citation: Joseph C. Siglin, Kenneth A. Voss and Peter J. Becci, 1985. A Range-Finding Teratology Study with AC6,601 in Rabbits. Food and Drug Research Laboratories, Inc., Waverly, NY. Study No. 8170. February 28, 1985. Unpublished.  
MRID 152569

Sponsor American Cyanamid Company, Princeton, NJ.

### Executive Summary:

In a range-finding developmental toxicity study in rabbits, malathion (92.4% purity) was administered by daily oral gavage to groups of 5 pregnant New Zealand White does on days 6 through 18 of gestation at dose levels of 0 (corn oil control), 25, 50, 100, 200 or 400 mg/kg/day. Females were impregnated by 1:1 matings with males followed by intravenous administration of 200 IU of human chorionic gonadotropin. Does were observed daily for mortality, clinical signs of toxicity, and other signs of pregnancy status. Body weights were determined frequently throughout the study. On day 29 of gestation, surviving does were euthanized. All does in the study were subjected to complete gross necropsy at the time of death or terminal sacrifice. The urogenital system of each animal was examined in detail. All fetuses were examined for external abnormalities.

Treatment-related and dose-related mortalities were observed. At 400 mg/kg/day, 4/5 (80%) does died--1 at gestational day (gd) 7, 1 at gd 8 and 2 at gd 9. At 200 mg/kg/day, 2/5 (40%) does died--1 at gd 11 and 1 at gd 17. At 400 mg/kg/day, clinical signs of toxicity, including decreased activity, salivation, tremors and urine stain were noted in most animals prior to death (beginning on gd 7). At 200 mg/kg/day, treatment-related tremors were observed in 1 doe on gd 10 and 11. Other likely signs of toxicity observed in 1/5 does at this dose level included decreased activity and salivation (beginning on gd

9 and gd 11 respectively). No mortalities and no clinical signs of toxicity were observed at 100, 50 or 25 mg/kg/day. External examinations of fetuses did not indicate any gross abnormalities at any dose level. Treatment-related mortalities and clinical signs of toxicity were observed in does at 400 mg/kg/day beginning on gd 7 (i.e. after a single dose of test material). Treatment-related mortalities and clinical signs of toxicity were also observed at 200 mg/kg/day, but were less frequent or severe and did not begin until after several (at least 3 or 4) doses of test material had been administered.

This study is **ACCEPTABLE** only as a range-finding study. It does **NOT SATISFY** guideline 83-3 for a developmental toxicity study in rabbits because many of the parameters required in guideline 83-3 were not included in this range-finding study. It **CAN NOT** be upgraded.

TB997:MALATH23.087

NRSD<sup>+</sup> 00152569

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