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DATA EVALUATION RECORD

TRICHLORFON

90-Day Feeding Study in Rabbits

CITATION: Abbasov T. 1971. Effects on rabbits of lengthy feeding with trichlorfon, phosphamide, trichlorometaphos-3 and methylnitrophos. Tr. Vses. Nauchno-Issled. Inst. Vet. Sanit. 39:220-227 [English translation].

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ACCESSION NUMBER: Not available.

MRID NUMBER: Not available.

LABORATORY: Not available.

TEST MATERIAL: Trichlorfon, purity and concentration not specified.

PROTOCOL:

- 1. The test animals were rabbits, weighing 3.0 to 3.5 kg.
- 2. Trichlorfon was administered to groups of animals in the diet for 3 months as follow:
 - a. Controls=8 animals
 - b. 15 mg/kg-3 animals
 - c. 30 mg/kg-3 animals
- The following parameters were studied:
 - a. Blood cholinesterase was measured weekly.
 - b. Body weight was measured biweekly.
 - c. Clinical observations were made daily.
 - d. Histopathology was performed at 3 months.

RESULTS:

At the 15 mg/kg dose there was no weight loss and cholinesterase activity in the blood was decreased by 10-20 percent. There were no histopathologic changes in the major tissues. At the 30 mg/kg dose, there was a 25 percent decrease in animal weight and a 20 to 45 percent decrease in blood cholinesterase activity. Pathologic changes at the high dose were seen in liver, lungs, heart, kidneys, and cerebrum. The livers were congested, there was some hyperemia, hemorrhaging, and necrosis. Lungs displayed

hyperemia, emphysema, and edema. There were dystrophic changes of the muscle of the heart, and hyperemia of the kidneys accompanied by dystrophic changes in tubular epithelium. The cerebrum showed hyperemia and serious edema.

CONCLUSIONS:

Doses of 15 mg/kg administered in the diet for a period of 30 days had no effects, but doses of 30 mg/kg caused weight loss, decrease in blood cholinesterase activity, and histopathologic changes in the liver, lungs, heart, cerebrum, and kidneys of rabbits. A NOEL of 15 mg/kg/day and a LOEL of 30 mg/kg/day can be established.

CORE CLASSIFICATION: Supplementary data.

There were only 3 animals in each of the treated groups and only two doses tested. The purity of the test material and the basis for calculating dose levels were not specified.