

SUMMARY

This formulation of carbaryl appears to have a very low degree of acute lethal toxicity to rats.

The data reviewed indicates that the formulation can be used without creating an undue human health hazard.

SEVINOL 4

Acute Rat Oral (Sevimol 4) : $LD_{50} = 1.41 \text{ ml/KG}$

Acute Rabbit Dermal (Sevimol 4) : $LD_{50} = 20 \text{ ml/KG}$

Acute Rat Inhalation (Sevimol 4) : $LD_{50} = 74940 \text{ mg/m}^3$

Acute Rabbit Dermal Irritation
(Sevimol 4) : Slight irritation noted.

Acute Rabbit Eye Irritation
(Sevimol 4) : No injury was noted.

Acute Rat Intraperitoneal
(Sevimol 4) : $LD_{50} = 0.210 \text{ ml/KG}$

SEVIMOL 4

Acute Rat Oral (Sevimol 4)

Five animals were used per dosage level of 1.0, 2.0, and 4.0 ml/KG.

Results:

LD₅₀ = 1.41 ml/KG. The 2.0 and 4.0 ml/KG dosage levels produced total death by 24 hours. The gross pathology noted included congestion of the lungs and abdominal viscera. The lungs and intestines were slightly hemorrhaged with livers being mottled.

Acute Rabbit Dermal (Sevimol 4)

Four rabbits were tested at dosage level of 10.0 and 20.0 ml/KG. An additional two animals were tested at the dosage level of 5.0 ml/KG. The material was applied undiluted.

Results:

The LD₅₀ = 20 ml/KG. This value does not appear to be extremely reliable due to one of two deaths at the 5.0 ml/KG dosage level and no deaths at 10 ml/KG. Animals receiving the two higher dosage levels showed considerable body weight loss. The animals at the 5.0 ml/KG showed body weight gained.

The animals which died showed congested lungs, pale and/or mottled livers. In one survivor the liver was pale, mottled and had prominent acini, the spleen was dark and the kidneys congested.

Acute Rat Inhalation

Six animals were tested at a concentration of 4940 mg/m³ total. Another six animals were tested at a concentration of 3793 mg/m³ total. Length of exposure was four hours.

Results:

No deaths occurred among the twelve animals. No observable adverse effects were noted.

Acute Rabbit Dermal Irritation (Sevimol 4)

No protocol is listed here. The report does state that a standard procedure was used and the test material was applied undiluted.

Results:

Moderate capillary injection among four of the animals, no reaction was noted on one animal. Evidently this is interpreted as being slightly irritating to the skin.

Acute Rabbit Eye Irritation

Exactly 0.5 ml of the test material was applied to five eyes in the undiluted state.

Results:

No corneal injury was noted.

Acute Rat Intraperitoneal (Sevimol 4)

Five animals were tested per dosage level of 0.125, 0.25, and 0.5 ml/KG.

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Results:

The LD₅₀ = 0.210 ml/KG. Each of the two top levels produced 80% deaths by 48 hours.

The animals which died showed congested lungs and abdominal viscera. The livers were also mottled.