DATA EVALUATION RECORD

1. CHEMICAL: Brodifacoum

2. FORMULATION: Assumed Technical

3. <u>CITATION</u>: WBA 8119: Acute oral toxicity to Beagle dogs and cats. by G.R. Parkinson, Jan. 1976. Acc. # 245704, submitted by ICI Americas, performed by English part of company.

4. REVIEWED BY: Russel Farringer Wildlife Biologist EEB/HED

5. DATE REVIEWED: 12/4/81

6. TEST TYPE: Acute Oral

A. <u>Test Species</u>: beagle dogs and cats

7. REPORTED RESULTS: LD₅₀ to Beagle dogs between 0.25 - 1 mg/kg LD₅₀ to cats approximately 25 mg/kg

8. REVIEWER's CONCLUSIONS: The results of this study have been reported here. The study has been deferred to Toxicology Branch/HED for validation. The study would not be adequate for registration actions for one or more of the following reasons; (1) number of animals used; (2) supplemental feed analysis not given; (3) dose response findings were inadequate to determine a true LD50; (4) No controls were indicated. The reported results tend to indicate that the product is highly toxic to beagle dogs and domestic cats.

entered date

DATA EVALUATION RECORD

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1. CHEMICAL: Brodifacoum

2. <u>FORMULATION</u>: (93.1% to 96% Pgre)

3. <u>CITATION</u>: Brodifacoum: Absorption, excretion and tissue retention in the rat. by H. Bratt, & Pamela Hundson for ICI, LTD, Alderly Park, Macclesfield, Cheshire, UK CTL Study No. URO110, Report No. -CTL/P/462, EPA Acc. # 245704.

4. REVIEWED BY: Russel Farringer

Wildlife Biologist

EEB/HED

5. DATE REVIEWED: 10/26/81

6. TEST TYPE: Brodifacoum: Absorption, excretion and tissue retention in the rat.

A. <u>Test Species</u>: Rat (?)

7. REPORTED RESULTS:

In the situation where predators consume rodents which have been poisoned by brodifacoum, there is a possibility that secondary poisoning may occur due to the presence of brodifacoum in the rodent carcass.

- 8. REVIEWER'S CONCLUSIONS: While the exportise need to fully evaluate the techniques and/or procedures of this study lie within another branch of HED, the following was excerted without validation.
 - 1) Absorption of brodifacoum may be a saturable process with fecal excretion increasing rapidly thereafter.
 - 2) Most (74.6%) of the dose was retained in the tissues of the animals 10 day after dosing, (0.25 mg/kg; 6.6 mc:/kg) principally in the liver (22.8%) and pancreas (2.3%), but also in kidney (0.8%), heart (0.1%) and spleen (0.2%). The remainder of the dose (approximately 50%) was present in the carcass and skin. Analysis showed that 31.3% and 19.6% of the dose was present in the carcass and live@ respectively was unchaged brodifacoum together with two other more polar components which were not identified. The biological half-life for the radioactive species in tissues was estimated to be 150-200 days.
 - 3) Brodifacoum has a moderate to high systemic toxicity to animals.