



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

6-3-86
005183

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: 6(a)(2) Data on Brodifacoum-containing
Rodenticides
EPA Reg. Nos. 10182-38, -39, -40, -41,
-60, -61, -75, -76
Caswell 114AAA Acc. No. 262910

TO: Mr. William Miller, Product Manager 16
Registration Division (TS-767C)

FROM: Byron T. Backus *Byron T. Backus*
Toxicologist, Section III 05/10/86
Toxicology Branch, HED (TS-769C)

THROUGH: Marcia van Gemert, Ph.D., Section Head
Review Section III
Toxicology Branch, HED (TS-769C) *M. van Gemert 6-3-86*
and
Theodore M. Farber, Ph.D. *Theodore M. Farber*
Chief, Toxicology Branch
Hazard Evaluation Division (TS-769C)

Chemical: Brodifacoum

Project No. 1770

Record No. 171623

Action Requested:

The Registration Division has sent (presumably for review and comment) 6(a)(2) data from ICI Americas Inc. relating to adverse incidents involving domestic animal ingestion of Brodifacoum-containing rodenticides reported to ICI during 1982-1985.

Background:

Brodifacoum is a potent anticoagulant rodenticide, with a comparatively long half-life (several months). Label use restrictions for pesticides containing this active include: "This product must be placed in tamper-proof bait boxes or in locations not accessible to children, pets, domestic animals or wildlife."

The registrant has submitted summaries of 54 calls received in the period 1982-1985 relating to ingestion of TALON 3 and HAVOC rodenticides by domestic animals.

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Recommendations:

1. Although ingestion of dead and dying rodents poisoned by Brodifacoum is hazardous to pets, this is not emphasized on the label (the only statement that appears to partially address the problem is under the heading ENVIRONMENTAL HAZARDS and is somewhat obscure: "This product can pose a secondary hazard to birds of prey and mammals."). Labeling should be revised to include a statement that specifically says that pets and domestic animals feeding on poisoned rodents may also die.
2. Since there is a possibility that chickens or other domestic animals (particularly swine) used as food may ingest Brodifacoum (either by eating bait or poisoned rodents), labeling should be revised to include a statement to the effect that meat from chickens and other domestic animals which have ingested either bait or poisoned rodents should not be used as either human or pet food, but should be disposed of appropriately.

Discussion:

Of the 64 incidents reported, most involved dogs or cats. A breakdown by species is given below:

Dogs	48 incidents
Cats	9 "
Chickens & peacock	1 incident
Chickens	1 "
"Bird"	1 "
Horse	1 "
Rabbit	1 "
Guinea Pig	1 "
Gerbil	1 "

In a number of these incidents, more than one animal was involved.

In all of these cases there was ingestion of the anticoagulant, either directly (from consumption of the bait), or secondarily (from consumption of poisoned rodents).

Even though individual incidents are only briefly summarized from what must have been phone conversations, and there were no follow-ups in most of the cases, these incidents raise a number of disturbing implications, including the following:

- 1) In many cases, the animals involved had access to poisoned bait over a period of several days

or weeks.

- 2) In at least one case (8/29/83) a "2 1/2-month old child fed pellets to puppy..." (Presumably it was actually a 2 1/2 year-old child that was involved). This indicates that the bait was accessible to a child.
- 3) In an incident reported 10/21/83 a "Woman said PCO put bait in house and said it would not harm cat but kitten had been bleeding since 10/19..."
- 4) In an incident reported 9/27/83: "Chickens were feeding on dead rats during past 3-4 weeks and were dying... Some chickens may have ingested bait."

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A copy of a representative label includes (under Directions for Use) a specification that the product is to be placed in tamper-proof bait boxes or in locations not accessible to children, pets or domestic animals. Directions also specify to collect and dispose of all dead animals.

BRODIFACOU

Page 4 is not included in this copy.

Pages _____ through _____ are not included.

The material not included contains the following type of information:

- ☐ Identity of product inert ingredients.
 - ☐ Identity of product impurities.
 - ☐ Description of the product manufacturing process.
 - ☐ Description of quality control procedures.
 - ☐ Identity of the source of product ingredients.
 - ☐ Sales or other commercial/financial information.
 - ☒ A draft product label.
 - ☐ The product confidential statement of formula.
 - ☐ Information about a pending registration action.
 - ☐ FIFRA registration data.
 - ☐ The document is a duplicate of page(s) _____.
 - ☐ The document is not responsive to the request.
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The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.
