

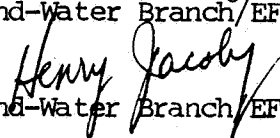
Shaughnessy No.: 080804

Date Out of EFGWB: 12/07/90

TO: B. Crompton
Product Manager # 50
Registration Division (H7505C)

FROM: Michael R. Barrett, Acting Head
Ground-Water Technology Section
Environmental Fate & Ground-Water Branch/EFED (H7505C)

THRU: Henry Jacoby, Chief
Environmental Fate & Ground-Water Branch/EFED (H7507C)



Attached, please find the EFGWB review of:

Reg./File #: 49351

Chemical Name: prometon (Pramitol®)

Type Product: Herbicide

Product Name: Pramitol®

Company Name: Ciba-Geigy Corp.

Purpose: Review proposed Pramitol® small-scale retrospective ground-water monitoring protocol

Date Received : 5/24/89 (in EFED)

Action Code: 665

Date Completed: 11/29/90

EFGWB # (s): 90598

Monitoring study requested: X

Total Review Time: 5 days

Monitoring study voluntarily:

Deferrals To: Ecological Effects Branch

 X Health Effects Division

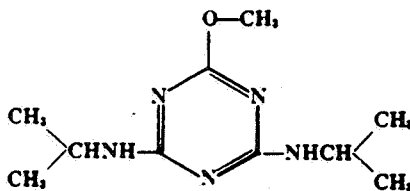
1. CHEMICAL:

Chemical name: 2,4-bis(isopropylamino)-6-methoxy-s-triazine

Common name: prometon

Trade name: Pramitol®

Structure:



2. TEST MATERIAL:

Not applicable

3. STUDY/ACTION TYPE:

Review of draft (proposed) protocol for small-scale retrospective ground-water monitoring study, and evaluate the registrant's request to waive the retrospective study and initiate a new prospective study.

4. STUDY IDENTIFICATION:

Title: Small-scale retrospective ground-water monitoring study for Pramitol®

Author(s): James Demartinis
Gary Dickson

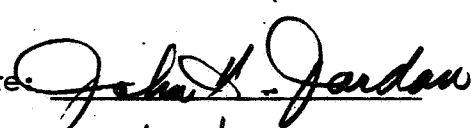
Submitted by: Roux Associates
The Huntington Atrium
775 Park Avenue
Suite 255
Huntington, New York 11743

for: Agricultural Division
CIBA-GEIGY Corporation
P.O. Box 18300
Greensboro, NC 27419

Identifying No. 080804
Action Code: 665
Accession No.: not given
Record Number: 245772
Date Sent to EFED: 5/24/89

5. REVIEWED BY:

John Jordan, Ph.D.
Microbiologist
OPP/EFED/EFGW/Ground-Water Section

Signature: 

Date: 11/29/90

6. APPROVED BY:

Michael R. Barrett, Ph.D
Acting Head, Ground-Water Section
Environmental Fate & Ground-Water Branch

Signature: 

Date: 12/7/90

7. CONCLUSIONS:

Review of the small-scale retrospective monitoring protocol indicates some deficiencies. For example, there is no provision for monitoring wells directly on the site; proposed wells are located offsite, one downgradient and one upgradient. Proposed soil sampling procedures would not permit randomization. The proposed protocol deviates from the EPA Ground-Water Monitoring Guidelines in several other ways. Because the half-life of prometon is >1 year, the protocol should specify continuation of monitoring for more than 2 years. The protocol is unacceptable until the necessary changes are made.

Due to the registrant's problems in securing a suitable site for the retrospective monitoring study, it seems advisable to wait for the new prospective study (protocol) which is to be conducted on a site purchased by the registrant.

8. RECOMMENDATIONS:

Because no suitable retrospective sites are presently available, it appears advisable to waive the original retrospective monitoring study protocol and to evaluate the new prospective study protocol to be submitted by January, 1991. After review of the new prospective protocol by the Ground-water Section, an EFGWB/registrant meeting should be scheduled to discuss details.

9. BACKGROUND:

Prometon is a non-selective preemergence and postemergence industrial herbicide used for weed control on non-crop land at a rate of 10 to 60 lbs. ai/Ac. The high rate is used on Johnson-grass, Bermuda-grass bindweed and wild carrot. Prometon is an s-triazine which is stable, persistent and mobile similar to other triazines, e.g., simazine. Moisture is required to move the chemical into the root zone.

10. DISCUSSION:

In lieu of an unacceptable field dissipation study, which did not define depth of leaching, a small-scale retrospective monitoring study was required by the Ground-Water Technology Section on 6/1/88.

In a telephone conversation with the registrant on 11/21/90, it was learned that there is no available site for the proposed ground-water study. It appears that the registrant will have to purchase a site and change the study from a retrospective to prospective. The registrant's representative indicated that they have a draft prospective protocol and will submit the new protocol to EFGWB in about four weeks.

The registrant's representative indicated that early 1992 is the proposed starting date for the new prospective study.

Unconfirmed reports (STORET, 1988) indicate that prometon was found in 36 of 746 ground-water samples collected at 250 ground-water locations in 12 states. The maximum concentration was 250 ppb.

The EPA Pesticides in Ground Water Data Base Interim Report, 1988, indicates that prometon was found in ground water at the maximum concentration of 29.6 ppb; the average residue concentration was 16.6 ppb. A Texas well water monitoring study in 1987/88 documented finding prometon residues in Knox County Texas at the 1.9 to 29.6 ppb level.

Related environmental fate characteristics
for prometon compared with those of some
pesticides that have been found to leach

| Name of Characteristic | Prometon Characteristics | Charact. of some pesticides known to leach (S. Cohen et al, 1984) |
|----------------------------------|--|---|
| Kd | *0.4 to 2.9 in 5 soils from sand to silty clay loam in texture and containing 0.8 to 5.0% O.M. | < 5, usually less than 1 or 2 |
| Koc | *48 to 100 | < 300 to 500 |
| Water solubility, mg/L | *620 @ 20C | > 30 |
| Henry's Law Constant (atmos/mol) | * 9.10×10^{-7} | < 10^{-5} |
| Photolysis, half-life, days | *In water, >> 30 | > 7 |
| Photolysis, half-life, days | *357 days on a sandy loam at 25C | > 14 or 21 |
| Hydrolysis rate, half-life days | * > 365 days | > 175 |
| * trigger factors | | |

5

Use this form for individual studies & to submit pesticide applications.



United States Environmental Protection Agency
Office of Pesticide Programs
Washington, DC 20460
Data Review Record
Confidential Business Information - Does not contain
National Security Information (E.O. 12065)

Pack Number
49351
EFED

Date Received
5-24-89

1. Product Name _____ Chemical Name **PROMETON**

| 2. Identifying Number | 3. Record Number | 4. Action Code | 5. MRID/ Accession Number | 6. Study Guideline or Narrative |
|-----------------------|------------------|----------------|---------------------------|---------------------------------|
| 000100-00443 | 24-772 | 665 | | small scale retrospective |
| 080804 | 8 | | | |
| | | | | |
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7. Reference No. _____ 8. Date Rec'd (EPA) **05/16/89** 9. Prod/Review Mgr/DCI **B. Crompton** 10. PM/RM Team No. **50** 11. Date to HED/EFED/RD/BEAD **5/24/89** 12. Proj Return Date **8/30/89** 13. Date Returned to RD/SRRD _____

Instructions
Protocol for review

This Section Applies to Review of Studies Only

14. Check Applicable Box
 Adverse 6(a)(2) Data (405) Generic Data (Reregistration)(660)
 Special Review Data (870) Product Specific Data (Reregistration)(655)

15. No. of Individual Studies Submitted _____

16. Have any of the above studies (in whole or in part) been previously submitted for review?
 Yes (Please identify the study(ies)) No

17. Related Actions _____

| 18. | To | Type of Review | 19. Reviews Also Sent to | 20. Data Review Criteria |
|------|-------------------------------------|----------------------------------|----------------------------------|--|
| HED | | Science Analysis & Coordination | <input type="checkbox"/> SAC | A. Policy Note No. 31 <input type="checkbox"/> 1 = data which meet 6(a)(2) or meet 3(c)(2)(B) flagging criteria <input type="checkbox"/> 2 = data of particular concern from registration standard <input type="checkbox"/> 3 = data necessary to determine tiered testing requirements |
| | | Toxicology/HFA | <input type="checkbox"/> TOX/HFA | |
| | | Toxicology/IR | <input type="checkbox"/> TOX/IR | |
| | | Dietary Exposure | <input type="checkbox"/> DEB | |
| EFED | | Nondietary Exposure | <input type="checkbox"/> NDE | B. Section 18 <input type="checkbox"/> 1 = data in support of section 3 in lieu of section 18 |
| | <input checked="" type="checkbox"/> | Ecological Effects | <input type="checkbox"/> EEB | |
| SRRD | | Environmental Fate & Groundwater | <input type="checkbox"/> EFGWB | C. Inert Ingredients <input type="checkbox"/> 1 = data in support of continued use of List 1 inert |
| | | Special Review | <input type="checkbox"/> SR | |
| | | Reregistration | <input type="checkbox"/> RER | |
| RD | | Generic Chemical Support | <input type="checkbox"/> GSC | |
| | | Insecticide-Rodenticide | <input type="checkbox"/> IR | |
| | | Fungicide-Herbicide | <input type="checkbox"/> FH | |
| | | Antimicrobial | <input type="checkbox"/> AM | |
| BEAD | | Product Chemistry | | |
| | | Precautionary Labeling | | |
| | | Economic Analysis | | |
| | | Analytical Chemistry | | |
| | | Biological Analysis | | |

Confidential Statement of Formula (EPA Form 8570-4) Attached (Trade Secrets) Label Attached