

106701

Date Out EAB: MAY 02 1986

To: G. Werdig
Product Manager 50
Registration Division (TS-767)

From: Samuel M. Creeger, Chief
Environmental Chemistry Review Section 1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)



Attached please find the environmental fate review of:

Reg./File No.: _____

Chemical: Posarone Ammonium

Type Product: Herbicide

Product Name: _____

Company Name: _____

Submission Purpose: Response submission for GWDCI/Waivers

Date In: 3/10/86

ACTION CODE: 495

EAB # 6382

Date Completed: MAY 02 1986

TAIS (level II) Days

0.5

- Deferrals To:
- _____ Ecological Effects Branch
 - _____ Residue Chemistry Branch
 - _____ Toxicology Branch

Monitoring study requested by EAB:

Monitoring study voluntarily conducted by registrant:

REGISTRATION DIVISION DATA REVIEW RECORD
 Confidential Business Information - Does Not Contain National Security Information (E.O. 12065)

Labels: letter attached
 13358
 3-10-86

1. CHEMICAL NAME FOSAMINE Ammonium			TO BE COMPLETED BY PM	
2. IDENTIFYING NUMBER 106701	3. ACTION CODE 495	4. ACCESSION NUMBER N/A	5. RECORD NUMBER 168 929	6. REFERENCE NUMBER
			7. DATE RECEIVED (EPA) 2/4/86	8. STATUTORY DUE DATE 15 Days
			9. PRODUCT MANAGER (PM) A. Ward	10. PM TEAM NUMBER 50

14. CHECK IF APPLICABLE

<input type="checkbox"/> Public Health/Quarantine	<input type="checkbox"/> Minor Use
<input type="checkbox"/> Substitute Chemical	<input type="checkbox"/> Part of IPM
<input type="checkbox"/> Chemical Disposal	<input type="checkbox"/> Review Required by 12 Hours

TO BE COMPLETED BY PCB

11. DATE SENT TO HED/TSS
03/07/86

12. PRIORITY NUMBER
20

13. PROJECTED RETURN DATE
05/08/86

15. INSTRUCTIONS TO REVIEWER

A. HED Total Assessment - 3(c)(5)
 Incremental Risk Assessment - 3(c)(7) and/or E.L. Johnson memo of May 12, 1977.

B. SPRD (Send Copy of Form to SPRD PM)
 Chemical Undergoing Active RPAR Review
 Chemical Undergoing Active Registration Standards Review

C. BFS
 D. TSS/RD
 E. Other

F. INSTRUCTIONS
 Attached is D. Potts response from meeting last week. Do you feel that data requirement 16-2 is still needed? Do you agree that data require 16-2 and 16-3 are not needed? If there is a 2 yr registration, do you agree with the term extension request?

16. RELATED ACTIONS
 Record # **1161929, 159238, 158344**

17. 3(c)(1)(D)
 Use Any or All Available Information Use Only Attached Data
 Use Only the Attached Data for Formulation and Any or All Available Information on the Technical or Manufacturing Chemical.

18. REVIEWS SENT TO

<input type="checkbox"/> TB	<input type="checkbox"/> EEB	<input type="checkbox"/> EF	<input type="checkbox"/> PL
<input type="checkbox"/> RCB	<input type="checkbox"/> EFB	<input type="checkbox"/> CH	<input type="checkbox"/> BFS

19. To	TYPE OF REVIEW	NUMBER OF ACTIONS							
		Registration	Petition	EUP	SLN	Sec. 18	Inert	MNR. USE	Other
HED	TOXICOLOGY								
	ECOLOGICAL EFFECTS								
	RESIDUE CHEMISTRY								
	ENVIRONMENTAL DATA								
RD/TSS	CHEMISTRY								
	EFFICACY								
	PRECAUTIONARY LABELING								
BFS	ECONOMIC ANALYSIS								

20. Label Submitted with Application Attached

21. Confidential Statement of Formula

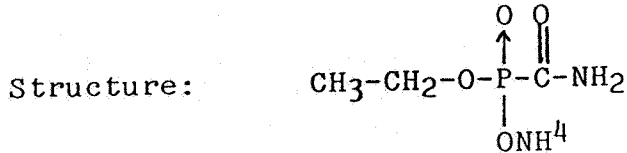
22. Representative Labels Showing Accepted Uses Attached

23. Date Returned to RD (to be completed by HED)

24. Include an Original and 4 (four) Copies of This Completed Form for Each Branch Checked for Review.

1. CHEMICAL:

Chemical name: Ammonium ethyl carbamoylphosphate
Common name: Fosamine Ammonium, Krenite



2. TEST MATERIAL:

Not applicable. No studies were submitted.

3. STUDY/ACTION TYPE:

A response submission from DuPont regarding a previous meeting held on 2/27/86. The submission asks whether the Soil Photolysis study (161-3) the Anaerobic Soil Metabolism study (162-2) and the Forestry Dissipation study (164-3) are necessary.

4. STUDY IDENTIFICATION:

Not applicable. No studies were submitted.

5. REVIEWED BY:

Catherine Eiden
Section # 1

Catherine Eiden
April 29, 1986

6. APPROVED BY:

Samuel Creeger, Chief
Section # 1

Samuel Creeger
~~April 29, 1986~~ MAY 02 1986

7. CONCLUSION:

On 2/27/86 a meeting was held between EAB and DuPont representatives. During that meeting, EAB imposed the Soil Photolysis study (161-3) on DuPont for Krenite. This decision still stands.

Also, during that meeting, DuPont agreed to repeat both the Hydrolysis study (161-1) and the Aqueous Photolysis study (161-2). This agreement still stands.

The Anaerobic Soil Metabolism study (162-2) was not discussed at the meeting of 2/27/86. However, EAB concludes that the Anaerobic Soil Metabolism study requirement (162-2) has been submitted. The data have been reviewed (see EAB review dated 11/4/85). The data satisfy the Anaerobic Soil Metabolism study (162-2) requirement.

The Forestry Dissipation study (164-3) is not required. Krenite is used in right-of-way spraying operations and in reforestation settings. Krenite is not used in a climax forest setting. EAB discussed the use patterns of Krenite with Bob Maxsey of DuPont at (302) 992-6029. Mr. Maxsey discussed tree-harvesting, brush-cutting, and litter-burning procedures used before spraying Krenite over an area in preparation for planting pine seedlings for reforestation. The original climax forest of oak and hickory trees is harvested, the brush is cut, and burned off, leaving a large field area covered with grasses and debris (tree limbs, scrub brush, roots and infant seedlings) that is sprayed with Krenite. EAB concludes that in this situation there is no need to conduct a Forestry Dissipation study (164-3) as Krenite is used in right-of-way and reforestation settings, neither of which are actual forest settings.

However, as discussed in the meeting of 2/27/86, a new Field Dissipation study (164-1) is still required, using conventional field dissipation study methods.

It is not necessary, at this time, that DuPont drop their 24c registrations.

8. RECOMMENDATION:

EAB recommends the following:

- 1) A Soil Photolysis study (161-3) is required.
- 2) An Anaerobic Soil Metabolism study (162-2) is not required. This data requirement has been satisfied.
- 3) A Forestry Dissipation study (164-3) is not required. Krenite is not used in a typical climax forest setting. It is used on right-of-ways and reforestation situations.
- 4) A new Field Dissipation study (164-1), as discussed at the meeting of 2/27/86, is still required, using conventional study methods.
- 5) As agreed at the meeting of 2/27/86, DuPont will repeat the Hydrolysis and Aqueous Photolysis studies (161-1 & 161-2).

9. BACKGROUND:

Krenite can be applied with ground or aerial spray equipment. Krenite is sprayed after tree-harvest, brush-cutting, and debris burning. This is a one-time application to prepare an area for pine seedling planting for reforestation purposes. As a reforested area requires 20-25 years to mature before being harvested and reforested, Krenite is applied one time in a 20-25 year period. More specific details on the directions for mixing and spraying are included on the label.

10. DISCUSSION OF INDIVIDUAL TEST OR STUDIES:

No studies were submitted with this protocol.

11. COMPLETION OF ONE LINER:

No new information submitted with this package for inclusion in a one-liner.

12. CBI:

No CBI submitted with this package.

March 14, 1986

MEMORANDUM:

TO: Sam Creeger

SUBJECT: Minutes of the Meeting on Krenite with DuPont, 2/27/86.

On February 27th, 1986, Sam Creeger and Catherine Eiden of EAB and Susan Lewis of RD held a meeting with DuPont representatives, Nancy Redfern and Priscilla Freedman, to discuss Krenite. During the meeting, study deficiencies for data required under the Ground-Water-Data-Call-In were discussed. Specifically, the Hydrolysis study (161-1), Photolysis in Water study (161-2), and Field Dissipation study (164-1) were discussed.

EAB maintained that all the studies discussed were deficient; DuPont agreed to repeat the studies.

Both the hydrolysis and photolysis studies showed inconsistent results, possibly because of non-sterilized conditions in the water used to conduct those studies. As stated, DuPont agreed to repeat the studies.

Regarding the field dissipation study, EAB maintains that a new study is necessary. Both EAB and DuPont agree that the field dissipation study submitted is scientifically valid; however, the use of stainless steel cylinders in the field methods was found to be questionable. EAB has 2 reservations about this method:

- 1) The method is used for chemicals applied at low rates; Krenite is applied at 11.3 kg/ha.
- 2) There are no "bridging" data to show that the stainless steel cylinder method and the conventional field dissipation method are comparable.

Therefore, EAB concluded that a new field dissipation study using conventional methods is necessary for Krenite. DuPont agreed. It was further concluded that the new study will require only 2-3 months to complete based on laboratory studies indicating that Krenite and its degradates have a short half-life (1-2 weeks).

EAB imposed the Photolysis on Soil study (161-3) on DuPont (even though it is not normally required for terrestrial non-crop uses) based on 158.35(c).

Catherine Eiden
Hazard Evaluation Division (TS-769-C)
Exposure Assessment Branch