

US EPA ARCHIVE DOCUMENT

Shaughnessy No. 128897

Date Out of EAB. SEP 25 1987

To: George La Rocca  
Product Manager #15  
Registration Division (TS-767C)

From: Emil Regelman, Supervisory Chemist  
Review Section #3  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769C)



Attached, please find the EAB review of...

Reg./File # : 10182-RRT  
Chemical Name: PP 321  
Type Product : Insecticide  
Product Name : Karate Insecticide  
Company Name : ICI Americas Inc.  
Purpose : Request for review of status of data base to support  
use on soybeans.

Date Received: 1/22/87 ACTION CODE: 110

Date Completed: \_\_\_\_\_ EAB #(s) : 70209

Monitoring study requested: \_\_\_\_\_ Total Reviewing Time 1.0 day

Monitoring study voluntarily: \_\_\_\_\_

Deferrals to: \_\_\_\_\_ Ecological Effects Branch  
\_\_\_\_\_ Residue Chemistry Branch  
\_\_\_\_\_ Toxicology Branch

1. CHEMICAL: Common name:

None

Chemical name:

(R+S)-alpha-Cyano-3-phenoxybenzyl-(1R+1S)-cis-3-(Z-2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate. It is a 1:1 mixture of the (Z)-(1R,3R), S ester and (Z)-(1S,3S), R ester.

Trade name(s):

Karate, the active ingredient is PP321

Formulations:

1 lb/gal EC

2. TEST MATERIAL: N/A No data were submitted for review.

3. STUDY/ACTION TYPE: Application for registration for Karate Insecticide (PP321) for use on soybeans.

4. STUDY IDENTIFICATION: The registrant has submitted a list of references of data previously submitted to support the proposed use on soybeans and claims that all data requirements have been satisfied. See ICI Americas application and letter of December 12, 1986.

5. REVIEWED BY:

Arthur Schlosser  
Chemist  
EAB/HED/OPP

Signature: Arthur O. Schlosser  
Date: Sept 25, 1987

6. APPROVED BY:

Emil Regelman  
Supervisory Chemist  
Review Section #3, EAB/HED/OPP

Signature: Emil Regelman  
Date: SEP 25 1987

7. CONCLUSIONS: A cross check with EAB files indicates that several data gaps still exist for the use of PP321 on soybeans. Reentry data will not be required for this use.

8. RECOMMENDATIONS: We cannot concur with the use of PP321 on soybeans. The following data are required to support this use: (1) anaerobic soil metabolism (161-2), (2) leaching and adsorption/desorption (163-1). Additional data are needed on a fourth soil type containing <1% organic matter. This study should be done using the column leaching or soil TLC methods if a batch equilibrium study is not feasible. (3) confined rotational crop (165-1) using PP321 ring-labeled in the alcohol moiety of the molecule. (4) fish accumulation (164-4) A field rotational crop study (165-2) may be needed if residues of significance are identified in the confined rotational crop study.

9. BACKGROUND:

A. Introduction

PP321 is a synthetic pyrethroid insecticide, described as (R+S)-alpha-cyano-3-phenoxybenzyl-(1R+1S)-cis-3-(Z-2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate. It is a 1:1 mixture of the (Z)-(1R,3R), S ester and (Z)-(1S,3S), R ester. It does not yet have a common chemical name.

B. Directions for Use

PP321 is a broad spectrum contact insecticide developed for use on soybeans. It is applied at 0.015-0.03 lb ai/A. The proposed formulation is a single active ingredient 1 lb/gal. It may be applied using ground equipment or aircraft. Do not apply more than 0.05 lb ai/A per season.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: No new data were submitted for review. Data to support the use on soybeans were referenced. See application of December 12, 1986.

11. COMPLETION OF ONE-LINER: Not applicable.

12. CBI APPENDIX: Not applicable. No data were submitted.