

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

AUG 14 1989

MEMORANDUM

SUBJECT: Imazapyr Plant Toxicity Studies (D231868) OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

FROM: Kathryn V. Montague, Biologist
ERB III
Environmental Fate and Effects Division (7507C) *Kathryn V. Montague* 128829

THRU: Daniel Bieder, Chief
ERB III
Environmental Fate and Effects Division (7507C) *Daniel Bieder*

TO: Kathryn Davis, PM 52
Special Review and Reregistration Division (7508W)

American Cyanamid has submitted Tier II plant toxicity studies using the isopropylamine salt of Imazapyr as a formulated product (2AS formulation, AC252,925). EFED has completed the review of this data. The conclusions of the data evaluations are summarized below:

Guideline Number	Species Tested	MRID #	Classification
123-1b	Onion, soybean and sugarbeet	438891-01	Core for formulated product.
123-2	<i>Selenastrum capricornutum</i>	438891-02	Core for formulated product.
123-2	<i>Lemna gibba</i>	438891-02	Core for formulated product.

The complete Data Evaluation Records for these studies are attached. The results are summarized below:

1. Effect of AC 252,925 in a 2AS formulation (with surfactant) on the growth of *Lemna gibba* (MRID No. 438891-02).

The study is scientifically sound and fulfills the guideline requirement for an acute aquatic plant study. The EC₅₀ was 21.5 ppb ai (95% C.L. 18.7 - 24.8 ppb ai). The NOEC was 13.0 ppb ai. The probit slope was not determined since the probit method was not the best method for determining the dose-response curve.

2. Effect of AC 252,925 in a 2AS formulation (with surfactant) on the growth of *Selenastrum capricornutum* (MRID No. 438891-02).



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The study is scientifically sound and fulfills the guideline requirement for an acute aquatic plant study. The EC_{50} was 14.1 ppb ai (95% C.L. 10.9 - 18.4 ppb ai). The NOEC was 8.75 ppb ai. The probit slope was not determined since the probit method was not the best method for determining the dose-response curve.

3. Tier 2 Nontarget Plant Vegetative Vigor Phytotoxicity Study Using AC 252,925 in a 2AS formulation. (MRID No. 438891-01)

This study is scientifically sound and fulfills the guideline requirements for a Tier II vegetative vigor study with terrestrial plants. Testing on only three species (onion, soybean and sugar beet) was required for the formulated product. Of the three, onion was the most sensitive monocot, with dry weight being the most sensitive parameter for this species. The EC_{25} was 0.012 lb ai/A, and the NOEC was 0.005 lb ai/A. Sugar beet was the most sensitive dicot, with dry weight again being the most sensitive parameter. The EC_{25} was 0.002 lb ai/A, and the NOEC was 0.001 lb ai/A.

The only outstanding data requirement for this chemical is guideline 71-4, avian reproduction testing with mallard and bobwhite quail. Avian reproduction studies submitted earlier (MRID Nos. 438314-01 and -02) were classified as supplemental and need to be repeated. If you have any questions, please contact Kathryn Montague (308-2804).

DP BARCODE: D231868

REREG CASE # 3021

CASE: 819533
SUBMISSION: S515367

DATA PACKAGE RECORD
BEAN SHEET

DATE: 01/29/97
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 606 GENERIC DATA
CHEMICALS: 128829 Imazapyr, isopropylamine salt

ID#: 128829-

COMPANY:

PRODUCT MANAGER: 52 KATHRYN DAVIS 703-308-8156 ROOM: CS1 3F3
PM TEAM REVIEWER: VIRGINIA DIETRICH 703-308-8157 ROOM: CS1 3H3
RECEIVED DATE: 12/26/95 DUE OUT DATE: 04/24/96

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 231868 EXPEDITE: N DATE SENT: 12/04/96 DATE RET.: / /
CHEMICAL: 128829 Imazapyr, isopropylamine salt
DP TYPE: 999 Miscellaneous Data Package

CSF: N

LABEL: N

ASSIGNED TO	DATE IN	DATE OUT	ADMIN DUE DATE: 04/03/97
DIV : EFED	1/29/97	/ /	NEGOT DATE: / /
BRAN: EFED <i>ERBIII</i>	1/29/97	AUG/14/1997	PROJ DATE: / /
SECT: <i>RSI</i>	1/29/97	/ /	
REVR: <i>DMCLANE</i>	1/29/97	/ /	
CONTR:	/ /	/ /	

* * * DATA REVIEW INSTRUCTIONS * * *

Please review the following plant tox data. 438891-02 for
123-2and 438891-01 123-1(b) veg.vigor. Thanks

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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