

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

AUG 1 A

MEMORANDUM

SUBJECT:

Imazapyr Plant Toxicity Studies (D231868) PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

FROM:

Kathryn V. Montague, Biologist

ERB III

Environmental Fate and Effects Division (7507C)/

TIR".

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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 Imazaypyr 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 | Selenastrum capricornutum | 438891-02 | Core for formulated product. |
| 123-2 | Lemna gibba | 438891-02 | Core for formulated product. |

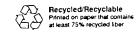
The complete Data Evaluation Records for these studies are attached. The results are summarized below:

Effect of AC 252,925 ina 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 EC_{50} 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.

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





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 requirements for a Tier II vegetative vigor study with terrestrial plants. Testing on only three species (onlon, 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 EC₂₅ 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 EC₂₅ 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).

REREG CASE # 3021 JP BARCODE: D231868

DATE: 01/29/97 DATA PACKAGE RECORD CASE: 819533

Page 1 of 1 SUBMISSION: S515367 BEAN SHEET

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REREGISTRATION ACTION: 606 GENERIC DATA

CHEMICALS: 128829 Imazapyr, isopropylamine salt

ID#: 128829-

COMPANY:

703-308-8156 ROOM: CS1 PRODUCT MANAGER: 52 KATHRYN DAVIS 3 F 3 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 * * *

DATE SENT: 12/04/96 DATE RET.: DP BARCODE: 231868 EXPEDITE: N

CHEMICAL: 128829 Imazapyr, isopropylamine salt

DP TYPE: 999 Miscellaneous Data Package

CSF: N LABEL: N ADMIN DUE DATE: 04/03/97 ASSIGNED TO DATE IN DATE OUT

-1129197 / / NEGOT DATE: DIV : EFED BRAN: EBER PROBIL 1/29/97 SECT: RS/ 1/29/97 AUG/ 1 4 1997 PROJ DATE: / /

REVR :DMCLANE 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 TNS CSF LABEL