

24-D/TOX

(30)



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

Formulation information deleted from pages 3 and 6.

OFFICE OF TOXIC SUBSTANCES

RELEASABLE

MEMORANDUM

DATE: APR 30 1980

SUBJECT: Section 18, emergency specific exemption, for the use of Weedmaster®,
EPA Reg. No. 876-203, on sugar cane. Cas. No. 295; Dicamba and Cas.
No. 315; 2,4-dichlorophenoxyacetic acid

FROM: Albin B. Kocialski, Ph.D.
Toxicology Branch/HED (TS-769)

Albin B. Kocialski
4/30/80

TO: Donald Stubbs
Emergency Response Section (TS-767)

WJ Bann

THRU: Edwin R. Budd
Section Head, Review Section II
Toxicology Branch/HED (TS-769)

Budd
4/30/80

Background

Aster lateriflorus was not previously an emergency problem primarily because of a previous Louisiana state label (EPA Accession (sic?) No. 876-10365) and later a 24(c) label for Weedmaster® use on sugar cane. The Weedmaster label for use on sugar cane was voluntarily withdrawn due to the lack of a Dicamba tolerance on this raw agricultural commodity. Previous Weedmaster use on sugar cane in Louisiana was;

<u>Year</u>	<u>Gallons</u>	<u>Acres</u>
1976	18,000	72,000
1977	30,000	120,000
1978	40,500	162,000
1979	42,000	168,000

The State of Louisiana is confident in the recommendation of Weedmaster since it was previously used on sugar cane and is commonly used on pastures in Louisiana.

Exemption

The State of Louisiana has requested an emergency specific exemption for the use of Weedmaster® to control Aster lateriflorus in sugar cane fields. Weedmaster is a combination of the dimethylamine salts of 2,4-D and dicamba.

The herbicide 2-4,D (CFR 180.142) is presently registered for use on sugar cane and carries a tolerance of 2.0 ppm. Dicamba (CFR 180.227) is not now registered for use on sugar cane but carries tolerances for asparagus, sorghum, corn grain, barley, oats, wheat and milk. All the inerts for this formulation have previously been cleared under 40CFR 180.1001.

Fourteen thousand gallons of Weedmaster, equivalent to 14,000 pounds of dicamba and 42,000 pounds of 2,4-D will be applied over 54,000 acres of sugar cane. The formulation will be applied at rates ranging between 1.0 and 1.5 quarts per acre for a 30 inch band on 72 inch rows. This rate range is equivalent to 0.6 to 0.9 pounds of dicamba per acre and 1.8 to 2.7 pounds of 2,4-D per acre. Ninety-percent of the applications will likely be made at the lower rate as based upon past use experience. Only one application will be made during the exemption period and that would be by private and/or certified applicators using ground equipment. The application would be made not later than May 30, 1980. Restrictions associated with this exemption are three; they are (1) a 120 day pre-harvest interval (2) the formulation will not be applied past close in and, (3) there will be only one application, which has already been mentioned. The Louisiana State Department of Agriculture will monitor the application of the herbicide to insure that the provisions of the specific exemptions are observed.

Residue chemistry branch has indicated that residues of Dicamba will not exceed 0.1 ppm if the use is limited to two (2) treatments. Residue chemistry foresees no problem with secondary residues (see attached). Donald Stubbs of the Emergency Response Section will publish that only one application will be allowed.

Permanent tolerances presently utilize 15.65% of the A.D.I. Approval of this Section 18 would raise the percent of the A.D.I. utilized to approximately 16.38%, the TMRC would increase by an increment of approximately 0.0055 mg/day. (See attached)

[REDACTED]

The Environmental Fate Branch just prior to December 20, 1978 indicated that they had confirmed the analysis report for [REDACTED] contamination submitted by Velsicol on EPA Reg. No. 876-42. The [REDACTED] contamination was determined to be 0.82 ppm (see attached). There was no [REDACTED] contamination reported and apparently none was expected. There was no objection to the analysis of this formulation for nitrosamine contamination (EPA Reg. No. 876-42)

Weedmaster (EPA Reg. No. 876-203) is for purposes of analysis qualitatively identical to the above formulation. Quantitatively, however, Weedmaster has 2.7 times less of the dimethylamine salt of dicamba and about 1.4 times less of the dimethylamine salt of 2,4-D (see attached).

Therefore one could expect that the [REDACTED] contaminant level would also be less than 0.82 ppm.

Environmental Chemistry Branch in their present proposal will not require an exposure analysis for uses of products containing less than 1.0 ppm of nitrosamine contaminant.

Residue Chemistry Branch, in their review of the proposed tolerances for dicamba in or on proso millet (PP 9E2166), speculated that if that formulation (49% dimethylamine salt of dicamba + 7.9% dimethylamine salts of related acids) contained 10 ppm [REDACTED] the calculated residues [REDACTED] in millet grain and straw would still be less than 1 part per billion.

There are apparently no pending regulatory actions known to this reviewer regarding Dicamba. The herbicide 2,4-D however is currently under pre-RPAR review.

Data supporting this Section 18 exemption for Dicamba is attached. The data supporting the permanent tolerance of 2,4-D on sugar cane is available in the Toxicology Branch files under Caswell number 315.

In view of the information available, this reviewer has no objection to the granting of the emergency specific exemption, provided that the Chemistry Branch reviewer presents no prohibitive objections.

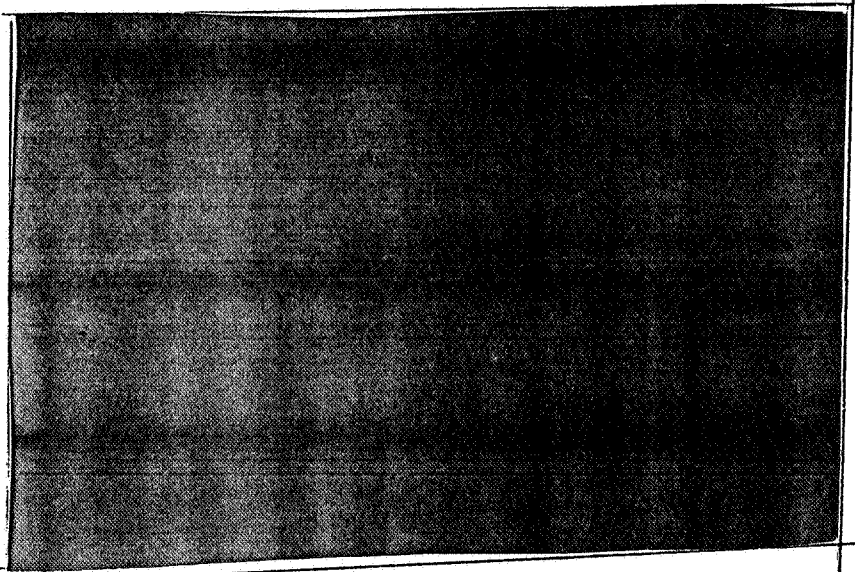
Dicamba (Technical)
EPA Reg. No. 876-36

AD LD ₅₀ - rat (core-minimum)	2.9 (\pm 0.8) grams/kg
AD LD ₅₀ - rabbit (core-minimum)	> 2.0 grams/kg
AI LC ₅₀ - rat (core-minimum)	> 9.6 mg/L for 4 hrs.
primary skin irritation - rabbit (core-guideline)	Not an irritant
primary eye irritation - rabbit (core-minimum)	Corrosive
3 generation rat reproduction	NOEL: 500 ppm
teratology/fetotoxicity - rabbit (core-guideline)	NOEL: 3.0 mg/kg Negative for terata at 10.0 mg/kg May be fetotoxic at 10.0 mg/kg
mutagenicity (Ames)	Negative
2 year oral feeding-dog	NOEL: 50 ppm Highest level tested: 50 ppm
2 year oral feeding-rat	INVALID (does not support registration)

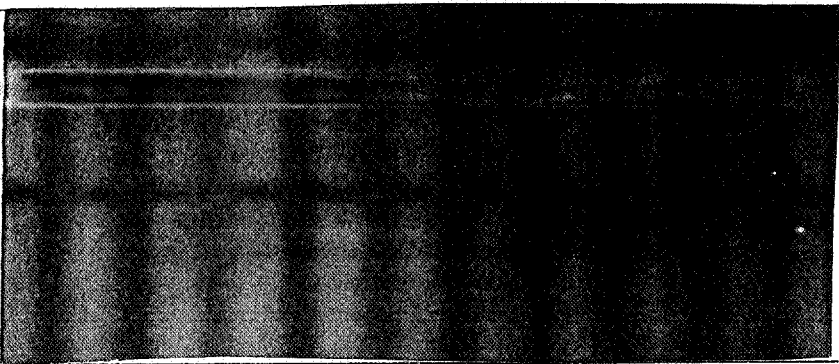
Weedmaster® Formulation
EPA Reg. No. 876-203

AOLD ₅₀ -rat (core-minimum)	> 5000.0 mg/kg
ADLD ₅₀ -rabbit (core-minimum)	> 20,000 mg/kg
AILC ₅₀ -rat (core-minimum)	> 20.3 mg/L
Primary eye irritation-rabbit (core-guideline)	Not Irritating
Primary skin irritation-rabbit (core-guideline)	Not Irritating

Weedmaster®, EPA Reg. No. 876-203, has the following confidential formula



EPA Reg. No. 876-42 (Banvel + 2,4-D) has the following confidential formula.



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Inert ingredient information deleted.