



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

005987

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

JUN 23 1986

MEMORANDUM

SUBJECT: EPA Registration Number 264-231  
Weedone 2,4-DP

FROM: Deloris F. Graham *DAG 7/7/86 Cy 7/7/86*  
Technical Support Section  
Fungicide-Herbicide Branch  
Registration Division (TS-767C)

TO: Richard F. Mountfort, PM 23  
Fungicide-Herbicide Branch  
Registration Division (TS-767C)

APPLICANT: Union Carbide Agricultural Products Company  
T.W. Alexander Drive  
P.O. Box 12014  
Research Triangle Park, NC 27709

ACTIVE INGREDIENT:  
2,4-Dichlorophenoxypropionic acid, butoxy-  
ethyl ester . . . . . 59.1%

INERT INGREDIENTS: . . . . . 40.9%

BACKGROUND:

Submitted Acute Dermal Toxicity Study under Agency code "400" (miscellaneous data). Study conducted by Union Carbide's Bushy Run Research Center. Study under Accession Number 251604. Method of support not indicated.

RECOMMENDATION:

1. FHB/TSS finds these data acceptable to support conditional registration of this product.
2. The appropriate toxicity category is III - ~~MAXIMUM~~ CAUTION

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LABEL:

In regard to acute dermal toxicity, the following precautionary statements must appear on label: ~~"avoid contact"~~ <sup>harmful</sup> if absorbed through skin. If on skin wash with plenty of soap and water. Get medical attention <sup>if irritation persists</sup>.

REVIEW:

- (1) Acute Dermal Toxicity Study: Bushy Run Research Center; Report 45-179; February 10, 1983.

PROCEDURE:

Two groups consisting of four male and four female rabbits with intact skin, and four males and four females with abraded skin sites were treated with one of the following doses: 1.0 or 2.0 ml/kg. One group consisting of four male rabbits with abraded skin sites were treated with a 1.4 ml/kg single dose. Another group consisting of four female rabbits with intact skin or four with abraded skin sites were treated with a 0.5 ml/kg single dose. Treated areas placed under occlusive wrap for 24-hour exposure. Observations made for 14 days posttreatment. Necropsy performed on all animals.

RESULTS:

At 1.0 mg/kg, 1/4 F with abraded skin, 1/4 F with intact skin, and 1/4 M with intact skin died; at 1.4 ml/kg, 3/4 M with abraded skin died; at 2.0 ml/kg, 2/4 F with abraded skin; 3/4 F with intact skin, 4/4 M with abraded skin and 1/4 M with intact skin died.

Sluggishness, prostration, unsteady gait, diarrhea, desquamation, fissuring, erythema, ecchymosis, and necrosis also reported.

Necropsy report indicated trachea with red patches; liver brown and yellow; lungs pink and black; bladder distended with black liquid; spleen mottled; autolysis; liver parasitic; liver mottled; gallbladder enlarged; stomach with dark circular areas; lungs tan and mottled; gallbladder opaque. LD<sub>50</sub> for males with intact skin reported to be greater than 2.0 ml/kg (~~2.0~~ g/kg). LD<sub>50</sub> for males with abraded skin reported to be 1.29 ml/kg (~~1.29~~ g/kg). LD<sub>50</sub> for females with intact skin reported to be 1.41 ml/kg (~~1.41~~ g/kg). LD<sub>50</sub> for females with abraded skin reported to be 2.0 ml/kg (~~0.06~~ g/kg).

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STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: I II - ~~III~~ CAUTION

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WEEDONE® 2,4-DP

WOODY PLANT HERBICIDE

Controls mixed brush on Highways, Railroads, and Utility Rights-of-way. Also controls solid stands of post, blackjack, sand shinnery oak, and sandsage.

ACTIVE INGREDIENT:

2,4-Dichlorophenoxypropionic acid, butoxyethyl ester\* . . . . . 59.1%

INERT INGREDIENTS . . . . . 40.9%

\*2,4-Dichlorophenoxypropionic acid equivalent -  
3.7 lb./gal. or 41.5%/wt.

E.P.A. Reg. No. 264-231 ZA

E.P.A. Est. No. 264-MO-01

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

IN CASE OF EMERGENCY, TELEPHONE COLLECT

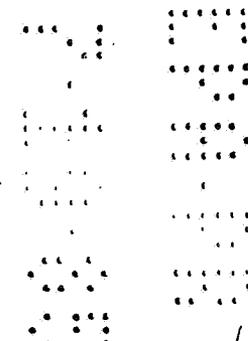
(24 HOURS A DAY) IN U.S.A. (304) 744-3487

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P.O. Box 12014, T.W. Alexander Drive, Research Triangle Park, N.C. 27709

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MADE IN U.S.A.

ACCEPTED  
with comments  
JUL 25 1985  
EPA Reg. No. 264-231  
registered under the pesticide  
Act  
Federal Insecticide,  
Fungicide, and  
Rodenticide Act



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Where red maple, conifers, and root-suckering species such as sassafras, sumac, black locust, or persimmon are the major problem, use 1 to 2 1/2 gallons WEEDONE 2,4-DP Woody Plant Herbicide in combination with 1 to 2 1/2 gallons AMDON 101 or Tordon\* 101 herbicide mixture or in combination with 3 to 6 pints AMDON K or Tordon\* K herbicide. Dilute with water and apply in a total spray volume of 15 to 50 gallons per acre. Use lower rates to control brush on sandy soils or coarse soils with susceptible species such as seedling aspen, cherry, willow, and sumac. Use higher rates to control brush on clay soils or fine soils or rocky terrain with more resistant species such as maple, oak, pine, and red cedar. When making the spray mixture, add WEEDONE 2,4-DP to the required amount of water while agitating the mixture in the spray tank. Then add the AMDON 101 or AMDON K while continuing agitation. (Do not mix concentrates of WEEDONE 2,4-DP with concentrates of AMDON 101 or AMDON K.) Aerial applications of the tank mixture should be made only with a helicopter mounted MICROFOIL® applicator or an equipment system providing equivalent drift control. Ground applications to control brush on railroad or utility rights-of-way should be made only with the DIRECTA-SPRA® spray applicator or an equipment system providing equivalent drift control. Do not use these tank mixtures on drainage ditchbanks or firebreaks. Observe all restrictions, precautions, and limitations on the labeling of each product used in tank mixtures.

\*Trademark of the Dow Chemical Company.

#### CAUTION

Harmful if swallowed. Avoid contact with eyes, skin, and clothing.

#### ENVIRONMENTAL HAZARD

This product is toxic to fish. Rinse spray equipment and containers and dispose of liquid wastes in a pit in non-croplands located away from water supplies and desirable vegetation. Keep out of any body of water.

Do not apply when runoff is likely to occur.

#### DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Do not apply WEEDONE 2,4-DP Woody Plant Herbicide near, directly to, or permit spray mist to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers, or other desirable crop or ornamental plants which are susceptible to 2,4-DP herbicide. Very small quantities of WEEDONE 2,4-DP Woody Plant Herbicide will cause severe injury during the growing or dormant periods. Crops contacted by WEEDONE 2,4-DP Woody Plant Herbicide sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction. Do not apply when weather conditions favor drift from target area.

Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate irrigation ditches or water used for domestic or irrigation purposes especially in areas where grapes, cotton, tomatoes, or other susceptible plants are grown. Do not use in a greenhouse.



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Do not graze dairy animals on treated areas within 6 weeks after application.  
Do not graze meat animals on treated areas within two weeks of slaughter.

Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion consult with local weather services before making an application.

Use coarse sprays to minimize drift. Do not apply with hollow cone-type insecticide or other nozzles that produce fine spray droplets. Do not apply when any wind is blowing toward susceptible crops or valuable plants. Drift from aerial application may be reduced by: (1) applying as near to the target as possible in order to obtain coverage; (2) by using 20 pounds of pressure or less at the nozzle tips; (3) by using nozzles which produce a coarse spray pattern; (4) by spraying only when the wind velocity is less than 5 miles per hour; (5) by applying sprays at low pressure and high volume; (6) by applying 5 or more gallons of spray per acre.

Under very high temperatures vapors from this product may injure susceptible plants in the immediate vicinity.

Drift from ground application may be reduced by: (1) keeping the spray as near to the target as possible in order to obtain complete coverage; (2) by applying 25 gallons or more of spray per acre; (3) by using no more than 20 pounds of pressure at the nozzle tips; (4) by using nozzles which produce a coarse spray pattern; and (5) by applying sprays at low pressure and high volume.

Under very high temperatures vapors from this product may injure susceptible plants in the immediate vicinity.

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STORAGE AND DISPOSAL

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STORAGE

Do not store near other pesticides, seeds, fertilizers, food, or feedstuffs.

PESTICIDE DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.



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## CONTAINER DISPOSAL

Do not reuse container. Do not burn. Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Local conditions may affect the use of herbicides. Consult your State Agriculture Experiment Station, Farm Advisors, or Extension Weed Specialist for advice in selecting treatment from this label to best fit local conditions.

Be sure that use of this product conforms to all applicable laws, rules, and regulations. Certain states have restrictions pertaining to the application distances from susceptible crops. The applicator should become familiar with these laws, rules, or regulations and follow them exactly.

## LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants that this product conforms to the chemical description on the label, that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions, and that the directions warnings and other statements on this label are based upon responsible experts evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues, and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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