

PM 23

34704-606

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

MAR 17 1994

William M. Mahlburg
Agent for: PLATTE CHEMICAL CO., INC.
P. O. Box 667
Greeley, CO 80632

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 11/01/93 in Response to PR Notice 93-7
EPA Reg. No. 34704-606
DEFY NON-VOLATILE 2,4-D BROADLEAF HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

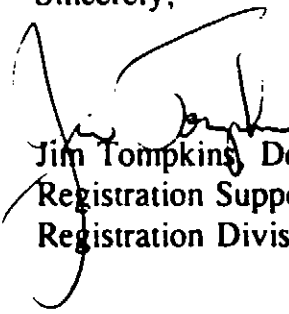
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

WILLIAM M. MAHLBURG Agent for
PLATTE CHEMICAL COMPANY

Comments for: EPA REG. NO. 34704-606
DEFY NON-VOLATILE 2,4-D BROADLEAF HERBICIDE

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

User Safety Recommendations must either be placed in a box or printed on the label in a contrasting color from surrounding text.

The bodywear requirement for mixer and loaders in the Personal Protective Equipment section on your proposed labeling should be "Long-sleeved shirt and long pants" . Remove the current "coveralls over short-sleeved shirt and short pants" and replace it with " long-sleeved shirt and long pants".

Move the statement "Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application." from its current position in the Agricultural Use Box to the "Directions for Use"

The bodywear requirement for early entry in the Agricultural Use Requirements Box on your proposed labeling should be "Coveralls". Remove the current "coveralls over short-sleeved shirt and short pants" and replace it with "Coveralls".

Unless there is a specific reason for the PPE for non-agricultural uses to be different from the PPE for agricultural uses, delete the indicated PPE statements from the Non-agricultural Use Box.

PROPOSED LABEL

DEFY

ACCEPTED
with COMMENTS
In EPA Letter Dated

MAR 17 1981

NON-VOLATILE 2,4-D BROADLEAF HERBICIDE

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

34704-606

Water Soluble Broadleaf Herbicide Crystals

ACTIVE INGREDIENT:	
Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid	95%
INERT INGREDIENTS:	5%
TOTAL	
100%	

Contains 78.9% 2,4-Dichlorophenoxyacetic acid equivalent by weight.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA REG. NO. 34704-606

EPA EST. NO. 37507-MT-1

NET WEIGHT 10 POUNDS (4.53 KG)

See Below For Additional Precautionary Statements

3486

WPSEX090/93

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Avoid inhalation of spray mist and contact with skin, eyes or clothing. In case of eye contact, flush with water for at least 15 minutes. In case of skin contact, wash with soap and plenty of water. Individuals allergic to pesticides should not use this product.

Personal Protective Equipment

Applicators and other handlers (other than mixers or loaders) must wear: Long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eyewear.

Mixers and loaders must wear: Coveralls over short-sleeved shirt and short pants, waterproof gloves, shoes plus socks and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washing exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

Engineering controls statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not contaminate water used for irrigation or domestic purposes. Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination or plant growth.

Groundwater Contamination: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT APPLY THIS HERBICIDE TO OR PERMIT IT TO COME IN CONTACT WITH 2,4-D SUSCEPTIBLE CROPS AND OTHER DESIRABLE BROADLEAF PLANTS. This herbicide is injurious to most broadleaf plants. Do not permit spray mist containing this product to come in contact with such plants since even very small quantities which may not be visible may cause severe injury. Susceptible crops include: cotton, grapes, tobacco, vegetables, flowers, fruit trees, ornamentals and other desirable plants. **DO NOT SPRAY WHEN SUSCEPTIBLE PLANTS OR CROPS ARE DOWNWIND.**

Ground equipment usually will result in less drift, but drift still may occur. Spray only when wind velocity is less than 5 miles per hour. Use coarse sprays, keep spray boom low, apply 20 gallons or more of spray per acre and use no more than 20 pounds per square inch spraying pressure. Do not apply with nozzles that produce a fine droplet spray.

Aerial application must only be made by applicators experienced in the use of 2,4-D herbicides. When aerial application is used, drift can be lessened by using no more than 20 pounds spray pressure, using nozzles which produce a coarse spray pattern, spraying only when wind velocity is less than 5 miles per hour, and spraying as close to the target area as possible. Use straight stream nozzles directed straight back and a spray boom no longer than 75% of the wing span of the aircraft. **DO NOT APPLY WHEN AN AIR TEMPERATURE INVERSION EXISTS. SUCH CONDITION CAN EXIST WHEN AIR TEMPERATURES ARE LOWER NEAR THE SURFACE THAN AT HIGHER ALTITUDES.** The use of a continuous smoke column at or near site of application is suggested

not necessary

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DEFY NON-VOLATILE 2,4-D BROADLEAF HERBICIDE EPA REG. NO. 34704-606

to indicate a possible temperature inversion by layering of the smoke or when dust is suspended in the air.

Drift can occur after application. For example, soil particles having 2,4-D on them may be moved considerable distances by wind storms. The risk of damage from this cause is reduced if treated fields are irrigated or if rain occurs shortly after application.

To avoid injury to desirable plants do not mix this herbicide with other agricultural chemicals. Always ensure spray tanks are thoroughly rinsed and cleaned before and after using this product.

Many states have laws regarding application of phenoxy herbicides. Because this product is a 2,4-D phenoxy herbicide, it too is subject to application local laws and governmental requirements or restrictions. Consult local regulatory agencies concerning requirements before making applications. Consult your Agricultural Extension Specialist for advice in selecting treatments which best fit local conditions. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ AND FOLLOW ALL DIRECTIONS AND USE PRECAUTIONS ON THIS LABEL PRIOR TO APPLICATIONS.

Do not apply this product through any type of irrigation system.

For any requirements specific to your State or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (40 CFR part 170). This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls over short-sleeved shirt and short pants, waterproof gloves, shoes plus socks and protective eyewear.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Do not store under conditions which might adversely affect the container or its ability to function properly. Such conditions include, but are not limited to, positioning of the container in storage, storage temperature, potential for crushing or damage due to stacking, and penetration of moisture.

STORAGE: Store in a safe manner. Store in original container only. Store in cool, dry place. Reduce stacking height where local conditions, such as humidity or pallet overhang can affect package strength.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide and Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL DIRECTIONS

This product is a water-soluble crystalline 2,4-D phenoxy herbicide useful in controlling susceptible broadleaf weeds. Species controlled include the following, plus many others:

Arrowhead
Bindweed
Buckhorn
Bull Thistle
Burdock
Cocklebur
Coffee Weed
Common Chickweed
Curly Dock
Curly Indigo
Dandelion
Dogfennel
Jimsonweed

Knotweed
Lambsquarter
Morning Glory
Mustard
Pigweed
Plainsains
Ragweed
Smartweed
Sunflower
Tansy Mustard
Thistle
Velvetleaf

The degree of control is dependent upon species, stage of growth and overall growing conditions. Best results are obtained when weeds are young and actively growing.

To prepare the spray solution: add about half of the water to the mixing tank, then add this herbicide with agitation and finally the balance of the water with continuing agitation. Use only water. Use 5 to 10 gallons of water to fully dissolve one pound of herbicide. Apply sufficient spray solution to insure uniform coverage, but at least 5 gallons spray solution per acre.

SELECTIVE WEED CONTROL IN CROPS

CORN (Field and Sweet) AND SORGHUM (Milo): Apply 1/2 to 1 pound of this herbicide per acre when corn and sorghum are at least 4 to 10 inches tall. Drop nozzles are recommended after the crop reaches 8 to 10 inches in height to keep spray off foliage. Do not apply to corn from tasseling to dough stage. Do not apply to sorghum during flowering or early dough stage. Do not cultivate within 10 days after spraying while plants are brittle. Injury is more likely to occur when the crop is rapidly growing under high temperature and high soil moisture conditions. Where these conditions prevail, use the low rate of 1/2 pound per acre. **NOTE:** Corn and sorghum hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or Agricultural Extension Specialist for this information.

SMALL GRAINS not Underseeded with a Legume (Wheat, Oats, and Barley): Apply 3/4 to 1 1/2 pounds of this herbicide per acre. On spring seeded grains use lower rate. Oats are more sensitive to 2,4-D than other grains and should be sprayed in the spring when well established. Spray after the crop is fully tillered and before the boot stage. Do not apply from early boot through milk stage. Do not permit dairy or meat animals to forage or graze treated fields within 2 weeks after treatment. Do not feed treated straw to livestock.

RICE: Apply 1/2 pound of this herbicide per acre. Rice plants are sensitive to 2,4-D in early stages of growth. Delay spraying until late stages of tillering, at the first joint development, usually 6 to 9 weeks after crop emergence. Make all treatments well in advance of heading.

SUGARCANE: Apply 1 pound of this herbicide per acre as fall and spring drill (or band sprays). Apply 1 1/2 pounds of this herbicide per acre as broadcast spray immediately after layby.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

USE REQUIREMENTS FOR PASTURE AND NONCROP AREAS OTHER THAN TURF: Do not enter treatment areas until spray has dried or dust has settled. For entry into a treatment area, wear eye protection, chemical-resistant clothing, long-sleeved shirt, long pants, socks and shoes.

TURF USE REQUIREMENTS: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

NOTE: For application to be used on lawns and other commercial uses, see the label for directions and product use or for research purposes, follow Agricultural Use Requirements on this label.

GRASS PASTURES: Apply 1/2 to 2 pounds of this herbicide per acre preferably when weeds are small before the bud or early bloom stage. Use the lower rate if annual and biennial weeds are the major problem, the higher rate for perennial weeds. Repeat treatments may be needed for hard-to-kill weeds. Use the same rates after 3 to 4 week interval. Do not use on alfalfa, clover and other legumes. Do not treat newly seeded grass until grass is well established and apply the lower rate. In grass seed fields, make application in spring before head comes into boot. Use 1/2 to 1 1/2 pounds per acre. In some cases, carpet, buffalo, St. Augustine and dichondra may be injured. Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

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**DEFY NON-VOLATILE 2,4-D
BROADLEAF HERBICIDE
EPA REG. NO. 34704-606**

**SELECTIVE WEED CONTROL IN NON-CROP AREAS
SUCH AS ALONG HIGHWAYS AND RAILROADS
RIGHTS-OF-WAY, DRAINAGE DITCH BANKS AND
AROUND FARM BUILDINGS**

For spot treatment, apply 1 to 2 pounds of this herbicide per acre in sufficient water to thoroughly wet the weeds. Repeat treatments may be required to kill noxious perennial weeds such as bindweed, whitemint, perennial sow thistle, blue lettuce, bur ragweed, and Canada thistle. Apply on vigorous spring growth to early bloom stage and on fall regrowth.

To control small areas of woody plants, such as willow, honeysuckle, Virginia Creeper, alder and others susceptible to 2,4-D use 2 pounds of this herbicide in 100 gallons of water; spray to thoroughly wet plants when in full leaf. Re-treat as necessary for control of regrowth and seedlings. In general, it is better to cut all woody growth and spray suckers when 2 to 4 feet high.

GRASS IN ESTABLISHED TURF AND LAWNS

Apply 1 to 4 ounces of this herbicide per 5,000 square feet (1/2 to 2 pounds per acre) preferably when weeds are small. Use the lower rate if annual and biennial weeds are the major problem, the higher rate for perennial weeds. Repeat treatments may be needed for hard-to-kill weeds. Use same rates after 3 to 4 week interval.

Apply 1/2 to 2 gallons spray solution per 1,000 square feet (20-80 gallons per acre) to insure uniform coverage.

Do not water for 48 hours after application.

Do not use on bentgrass, clover and other legumes. Do not treat newly seeded grass until grass is well established and apply the lower rate. In some cases, carpet, buffalo, St. Augustine and dichondra may be injured. The maximum number of broadcast applications per treatment site is 2 per year.

NOTICE OF WARRANTY

PLATTE WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSES STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS UNDER NORMAL USE CONDITIONS. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF PLATTE. IN NO CASE SHALL PLATTE BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

EXCEPT AS EXPRESSLY PROVIDED HEREIN, PLATTE MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESSED OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE.

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Formulated for
PLATTE CHEMICAL CO.
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