



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

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CEDAR CHEMICAL CORPORATION
5100 Poplar - Suite 2414
Memphis, TN 38137

**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

**Subject: Label Amendment Submission of 09/01/93 in Response to PR Notice 93-7
EPA Reg. No. 56077-26
BUTOXONE 200 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/Candle Ink on paper that
contains at least 50% recycled fiber

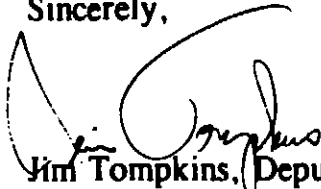
Submit the final printed labeling via the U.S. Postal Service to:

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

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Jeanine M Heishman
CEDAR CHEMICAL CORPORATION
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MEMPHIS TN 38137

Comment for: EPA Reg Nr.56077-26
BUTOXONE 200 HERBICIDE

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

Add the following statement to the "Personal Protective Equipment" section of your label: "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them." The exact location of this statement is shown in Section A on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

The glove requirement for "applicators and other handlers" in the "Personal Protective Equipment" section on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves". The exact location is shown in Sections A and B on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

The glove requirement for early entry in the Agricultural Use Requirements box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Waterproof gloves". The exact location is shown in Sections F and G on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Delete the crossed-out statements on your proposed label. They are redundant statements or phrases.

9.16
ACCEPTED
with COMMENTS
in EPA Letter Dated

MAR 17 1994

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

56077-26

BUTOXONE 200 HERBICIDE

For the control of certain seedling broadleaf weeds in peanuts, soybeans, and seedling stands of alfalfa, and for use on established stands of alfalfa.

Active Ingredients:

Dimethylamine salt of 4-(2,4-dichlorophenoxy)

butyric acid*.....26.20%

Inert Ingredients:.....73.80%

TOTAL.....100.00%

*Equivalent to 22.2% by weight of 4-(2,4-dichlorophenoxy) butyric acid, or not less than 2 lbs. 4-(2,4-DB) acid per gal. at 68°F.

EPA Registration No. 56077-26

EPA Establishment No.

~~Si usted no entiende la etiqueta, busque a alguien para que se~~
~~explique a usted en detalle. (If you do not understand the~~
~~label, find someone to explain it to you in detail.)~~

KEEP OUT OF REACH OF CHILDREN

~~PELIGRO - DANGER~~

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

If on Skin: Wash contaminated areas thoroughly with soap and water. Do not reuse contaminated clothing until washed. Get medical attention if irritation persists.

If in Eyes: Flush with plenty of water. Call a physician.

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER:

Corrosive. Causes irreversible eye damage. Due to corrosive nature, may be harmful or fatal if swallowed. May be harmful if inhaled or absorbed through skin. Do not get in eyes, on skin or clothing. Avoid breathing spray mist. When handling this product, wear chemical resistant gloves and goggles or face shield.

PERSONAL PROTECTIVE EQUIPMENT

Workers and other handlers must wear:

Long-sleeved shirt and long pants

Chemical resistant gloves

Protective socks

Protective eyewear

Chemical resistant headgear for overhead exposure

Follow manufacturer's instructions for cleaning/maintaining PPE.

If no such instructions for washables, use detergent and hot water.

Keep and wash PPE separately from other laundry.

RECOMMENDATIONS

Do not handle before eating, drinking, chewing gum, using tobacco or using the toilet.

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

Do not apply directly to water, 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 contaminate water intended for irrigation or domestic purposes. Do not apply when weather conditions favor drift from target area.

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GROUNDWATER CONTAMINATION: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-DB have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-DB 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 spill will help prevent groundwater contamination.

**FOR CHEMICAL SPILL, LEAK, FIRE OR
EXPOSURE, CALL TOLL FREE 1-800-424-9300**

**AGRICULTURAL CHEMICAL
DO NOT SHIP OR STORE WITH FOODS, FEEDS,
DRUGS, OR CLOTHING.**

NET CONTENTS:

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DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. ~~Do not apply this product in a way that will contact workers or other persons, either directly or indirectly, during the application process, or during the reentry interval.~~

RESTRICTED ENTRY INTERVAL REQUIREMENTS

~~This product is to be used in accordance with its labeling and with the Worker Protection Standard (WPS) (40 CFR 155.120). This Standard is the minimum requirement for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, notification, and emergency assistance, and also contains specific instructions and exceptions pertaining to the requirements on this label about persons' protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.~~

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

~~PPE required for early entry to 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~~
- ~~chemical-resistant gloves~~
- ~~shoes plus socks~~
- ~~protective eyewear~~
- ~~chemical-resistant headgear for overhead exposure~~

STORAGE AND DISPOSAL

STORAGE: Do not contaminate water, food, or feed, by storage or disposal. Open dumping is prohibited. Do not store this product near fertilizers, seeds, insecticides, or fungicides. Store at temperatures above 32°F. If product is allowed to freeze warm to 50°F and agitate thoroughly before using. Containers should not be stacked more than six (6) high. Reclose all partially used containers by thoroughly tightening screw cap. Damaged or leaking containers which cannot be used immediately should be transferred to suitable sound containers and properly marked. Absorb any spill with a suitable clay absorbent and dispose between of as indicated under "Pesticide Disposal".

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For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities.

To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification.

Opened, partially used pesticides should be stored in original labeled containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark, and identify contents of the new container.

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

CONTAINER DISPOSAL: 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. If burned, stay out of smoke.

Apply this product only as specified on this label.

NOTE: Avoid spray drift to susceptible plants and crops: cotton, tobacco, tomatoes, ornamentals, etc. Coarse sprays are less likely to drift.

Spray equipment previously used to apply another phenoxy must be thoroughly cleaned with alkali and water prior to use with Butoxone 200. Similarly after using Butoxone 200 wash sprayer thoroughly before using again to spray susceptible crops. Do not use near greenhouses. Observe all caution and limitations on labelling of all products used in mixtures.

Use agitation to keep solution well mixed, especially if it has been allowed to stand unagitated.

Calibrate spray accurately.

DO NOT APPLY WHEN CROP IS STRESSED FROM LACK OF MOISTURE.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

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ALFALFA

APPLICATION:

For use in seedling alfalfa, spray when the crop has reached the 1 to 2 trifoliate leaf stage and growing conditions are good. In established alfalfa certain weeds will emerge in the fall and over winter in a rosette stage. Best control of these weeds will result from application in late fall or early winter rather than in the spring. Do not apply after flowering.

WHEN TO APPLY:

Weeds must be in the young seedling stage and actively growing to achieve satisfactory results. For best results spray weeds in the 2 to 5 leaf stage of growth.

AMOUNT TO USE:

Apply Butoxone 200 as an overall spray by ground sprayer or airplane. Apply at rates listed below according to weed problems. Use the higher rate if weeds are past the seedling stage. Aerial applications should be made in 10 gallons of water per acre, while ground sprayer applications should be in 20 to 30 gallons of water per acre. Spray gallonage should give adequate coverage of the weeds without run-off. The use of an approved non-ionic surfactant for agricultural uses (such as X-77, Surfactant WK, etc.) at their label rates will usually result in better weed control, especially if weeds are beyond the seedling stage. Do not use with surfactant in the desert areas of Arizona and California.

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<u>BROADLEAF WEEDS</u>	Rate of Butoxone 200 Per Acre
Annual Morningglory (Ipomoea spp.)	4 pints
Cocklebur (Xanthium spp.)	
Common Lambsquarters (Chenopodium album)	
Jimsonweed (Datura stramonium)	
Kochia or Mexican Fireweed (Kochia scoparia)	
Pigweed (Amaranthus spp.)	
Velvetleaf (Abutilon theophrasti)	
<u>Wild Turnip (Brassica campestris)</u>	
Black Mustard (Brassica nigra)	6 pints
Buckhorn Plantain (Plantago lanceolata)	
Common Ragweed (Ambrosia artemisiifolia)	
Curly Dock (Rumex crispus)	
Field Pennycress (Fanweed or Stinkweed) (Thlaspi arvense)	
Hedge Smartweed (Polygonum scandens)	
Ladysthumb (Polygonum persicaria)	
Prickly Lettuce (Lactuca serriola)	
Shepherdspurse (Capsella bursa-pastoris)	
Sweetclover (Volunteer plants) (Melilotus spp.)	
Wild Beet (Beta maritima)	
<u>Wild Mustard (Brassica Kaber)</u>	

Do not graze established alfalfa, nor feed straw or hay from established alfalfa to livestock within 30 days after application. Do not graze or feed SEEDLING alfalfa within 60 days after application. Irrigation, in particular, overhead sprinkler irrigation should be delayed as long as possible (10 days or more) following application of Butoxone 200 to avoid washing the chemical into the root zone. Do not apply when crop is stressed from lack of moisture. DO NOT use on peas.

Apply as a postemergent spray. When properly timed there is little or no effect on the crop. In established alfalfa there may be some twisting of stems and malformation of leaves. This condition is usually outgrown.

Do not spray when daytime temperatures are expected to exceed 90°F within the next 2 or 3 days. Do not apply if temperatures are likely to fall below 40°F during or shortly after treatment.

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PEANUTS

APPLICATION: Apply Butoxone 200 postemergent as an overall spray by ground sprayer or airplane. With ground applications use a boom sprayer with flat fan-type nozzle. Adjust the height of the boom above the crop so the growing terminals of weeds are sprayed. Use low pressure (about 20 to 40 lbs. per sq. inch). Do not use boom jet nozzles. With airplane applications Butoxone 200 has been successfully applied using 5 gallons of total solution per acre. The height of the application should insure THOROUGH COVERAGE of the tops of the weeds. Best control has resulted from airplane application with coarse spray when cocklebur is at least crop high and actively growing. Other weed species should be in the seedling stage and actively growing. Airplane application is not recommended in the vicinity of susceptible crops.

Do not apply if peanuts are suffering from lack of moisture.

Amount to Use: Apply the recommended rates as indicated in the tables below.

<u>BROADLEAF WEEDS</u>	<u>Rate of Butoxone 200 Per Acre</u>
Cocklebur (<i>Xanthium</i> spp.)	0.9 pint (1 gal/9 acres)
Annual Morningglory (<i>Ipomoea</i> spp.)	1.6 pints (1 gal/5 acres)
Common Lambsquarters (<i>Chenopodium album</i>)	
Common Ragweed (<i>Ambrosia artemisiifolia</i>)	
Jimsonweed (<i>Datura stamonium</i>)	
Sicklepod (Coffeeweed) (<i>Cassia obtusifolia</i>)	
<u>Velvetleaf (<i>Abutilon theophrasti</i>)</u>	

Do not apply more than two (2) applications per season; second application should be made no later than the late bloom stage of peanuts (about 90 to 100 days after planting). Do not feed treated peanut vines or peanut hay to livestock. Do not apply to peanuts within 30 days of harvest.

SOYBEANS

APPLICATION: Apply Butoxone 200 postemergent as an overall spray by ground sprayer or airplane. With ground applications use a boom sprayer with flat fan-type nozzles. Adjust the height of the boom above the crop so the growing terminals of all weeds are sprayed. Use low pressure (about 20 to 40 lbs. per sq. inch). Do not use boom jet nozzles. With airplane applications Butoxone 200 has been

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successfully applied using 5 gallons of total spray solution per acre. The height of the application should insure thorough coverage of the tops of the weeds. Best control has resulted when cocklebur is at least crop high and actively growing. Airplane application is not recommended in the vicinity of susceptible crops. Do not apply if soybeans are suffering from lack of moisture.

TOPICAL (OVERHEAD) APPLICATIONS

Apply from 7 to 10 days before soybeans bloom through mid-bloom. A good indication that the beans are about to bloom is when the soybean plants have turned a dark green color. If application is made 7 to 10 days before bloom, apply one (1) gallon of Butoxone 200 per 11 acres; if application is made from early-bloom through mid-bloom, apply 1 gallon of Butoxone 200 per 9 acres. Use sufficient water to obtain adequate coverage. The rates recommended are for the control of cocklebur. These rates will also stunt or partially control certain other weeds including annual morningglory, velvetleaf, and jimsonweed. In the Midwest use only a directed application since topical application may reduce soybean yields.

NOTICE: Application should not be made to sparsely foliated stands stressed because of disease or lack of moisture. It is essential that the canopy above the soybeans be complete. To apply the product otherwise could result in crop damage such as stalk and stem splitting, and reduction in yield.

DIRECTED APPLICATIONS

For best results apply when weeds do not exceed 3 inches in height. Good coverage of the growing terminals of weeds is essential for effective control. Do not allow spray pattern to contact more than the lower one-third of the soybean plants.

Do not apply more than two (2) applications per season. Precise application is essential to prevent damage to the crop. In order to maintain the correct spraying height, nozzles must be mounted on oiling shoes, skid shoes, or on cultivators with gauge wheels. Do not use booms with drop nozzles.

First Application: Apply as directed spray when soybeans are 8 to 12 inches tall and weeds have emerged.

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Second Application: Apply as directed spray no later than mid-bloom stage.

Third Application: Apply the recommended rates as indicated in the table below.

<u>BROADLEAF WEEDS</u>	<u>Rate of Butoxone</u> <u>200 Per Acre</u>
Cocklebur (<i>Xanthium</i> spp.)	0.9 pint (1 gal/9 acres)
Annual Morningglory (<i>Ipomoea</i> spp.)	1.6 pints (1 gal/5 acres)
Common Lambsquarters (<i>Chenopodium album</i>)	
Common Ragweed (<i>Ambrosia artemisiifolia</i>)	
Jimsonweed (<i>Datura stramonium</i>)	
Sicklepod (Coffeeweed) (<i>Cassia obtusifolia</i>)	
<u>Velvetleaf (<i>Abutilon theophrasti</i>)</u>	

While some temporary twisting of soybean plants may follow an application, this will have little or no permanent effect on the crop.

Applications made under adverse growing conditions, such as periods of drought, will result in injury to the beans; under such conditions the crop should not be sprayed.

Do not spray Butoxone on soybeans showing a general infestation of *Phytophthora*.

Do not apply more than the recommended amount.

Do not harvest soybeans within 60 days after application.

Do not use on soybeans grown West of the Rocky Mountains.

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**DIRECTED
BAND APPLICATIONS
OF MIXTURES OF BUTOXONE
AND LOROX 50 W**

Application: Apply directed spray when beans are at least 8 inches tall and when weeds do not exceed two inches in height. Direct spray to cover weed foliage with minimum contact of the soybean plant. Do not spray higher than 3 inches on the soybean stem or crop injury may result. Use an 8002T-Jet (or equivalent) or larger with minimum of 25 gallons per broadcast acre and spray pressure of 20 to 25 psi, to avoid spray drift. For each 25 gallons of spray mixture a pint of surfactant such as Surfactant WK may be added. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate by mechanical or hydraulic means; if by-pass or return line is used, it should terminate at the bottom of the tank to minimize foaming. Openings in nozzle screen should be equal to or larger than 50 mesh. Apply with sprayer nozzles mounted on skid shoes, oiling shoes, or on cultivators with gauge wheels. Do not mount on booms with drop nozzles or on cultivators without gauge wheels.

Amount to Use: Apply the recommended rates as indicated in the table below.

BROADLEAF WEEDS	Rate of Butoxone 200 and Lorox per broadcast acre
Annual Morningglory (Ipomoea spp.)	0.9 pint +
Cocklebur (Xanthium spp.)	1 pound
Common Lambsquarters (Chenopodium album)	
Common Ragweed (Ambrosia artemisiifolia)	
Crabgrass (Digitaria spp.) (2 leaf)	
Jimsonweed (Datura stramonium)	
Prickly Sida (Teaweed) (Sida spinosa)	
Sesbania (Sesbania spp.)	
<u>Velvetleaf (Abutilon theophrasti)</u>	

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Use a proportional amount of the two chemicals on the band (for example, on a 12 inch band in 36 inch rows use $\frac{1}{4}$ pint of Butoxone 200 and $\frac{1}{4}$ lb. of Lorox per acre). If a new flush of weeds occur after initial treatment, make a second application but do not apply within 60 days of harvest or make more than 2 applications per growing season. Do not allow spray or spray drift to contact growing terminals of beans, as excessive crop injury will result. Do not feed soybean forage or hay to livestock from fields treated with this mixture. Harvested soybeans may be used for feed or oil purposes.

NOTE: Do not use on sands, loamy sands, gravelly soils, or on exposed sub-soils. Do not use on soils containing less than $\frac{1}{2}$ % organic matter as crop injury may result. Observe all cautions and limitations of labeling of all products used in mixture.

NOTE: THE LOROX 50W, BUTOXONE 200 TANK MIX IS NOT APPROVED FOR USE IN CALIFORNIA.

**** Lorox 50W-registered trademark of E.I. duPont de Nemours & Co. (Inc.)**

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**CONDITIONS OF
SALE AND WARRANTY**

CEDAR AND SELLER OFFER THIS PRODUCT AND THE BUYER AND USER ACCEPTS THIS PRODUCT UNDER THE FOLLOWING AGREED CONDITIONS OF SALE AND WARRANTY.

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to take into account all variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions which are beyond the control of Cedar or the Seller. Cedar warrants only that this product conforms to the chemical description on the label and is believed to be reasonably fit for the purposes referred to in the Directions for Use when used as directed under normal conditions. CEDAR MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. In no case shall Cedar or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. Any variation or exception from this warranty must be in writing and signed by an authorized Cedar representative.

**CEDAR CHEMICAL CORPORATION
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