

CHEM NUT



2,4-DB 175

**SELECTIVE POST EMERGENCE HERBICIDE FOR
COCKLEBUR CONTROL IN PEANUTS AND SOYBEANS**

Active Ingredient:

Density,amine salt of 4-(2,4-dichlorophenoxy)butyric acid*	23.09%
Inert Ingredients:	77.01%
Total	100.00%

*Equivalent weight of 4-(2,4-dichlorophenoxy)butyric acid, anhydrous form (1.25 lbs. 4.24 lb.) per gal. at 68°F.

STOP — READ LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person. Get medical attention.

If on skin: Wash contaminated areas thoroughly with soap and water. Get medical attention if irritation persists.

If in eyes: Flush with copious amounts of clean water for 10-15 minutes. Get medical attention.

EPA REG. NO. 2749-126-37699

EPA EST. NO. 11685-EN-001

NET CONTENTS: 1 GALLON.

MADE IN ENGLAND

Manufactured For:

CHEM NUT INC., P.O. Box 3706, 1918 Ledo Road, Albany, Georgia 31706

1.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Avoid breathing spray mist. Avoid contact with skin and eyes. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

PERSONAL PROTECTIVE EQUIPMENT:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Water proof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure
- Protective Eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

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.

USER SAFETY RECOMMENDATIONS:

- Wash hands 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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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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.

**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.

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 through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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AGRICULTURAL USE REQUIREMENTS Continued.

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
Water proof gloves
shoes plus socks

chemical-resistant headgear for overhead exposure
Protective eyewear

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 of as indicated under "Pesticide Disposal".

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.

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 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 worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

4.

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 requirements 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.

COMMON NAME	BOTANICAL NAME	SUPPRESSION ONLY IF LARGER THAN
Rigweed or careless weed	Amaranthus sp.	3 inches
Morningglory	Ipomoea sp.	3 feet
Cocklebur	Xanthium sp.	3 feet
Velvetleaf	Abutilon theophrasti	1 inch
Virginia creeperleaf	Acalpha virginica	1 inch
Teaweed	Sida spinosa	1 inch
Common ragweed	Ambrosia artemisiifolia	1 inch
Jimsonweed	Datura stramonium	1 1/2 inch
Devils claw	Prostriscia louisianica	2 inches
Coalweed	Croton lindheimeri	1 inch
Lambquarters	Chenopodium album	1 inch
Silverleaf nightshade	Solanum elaeagnifolium	4 inches

5.

SOYBEANS

RESTRICTIONS AND LIMITATIONS

Drought stressed beans should not be sprayed. Do not harvest beans within 60 days after application. Use either the over-all or the directed application. Do not use both applications on the same field in the same season. Do not use this product on soybeans that show symptoms of Phytophthora root rot disease. Do not add any wetting agents or detergents to the spray solution.

OVER-ALL APPLICATIONS:

For control of cocklebur and morningglory, use 0.8 to 1.0 pint of 2,4-DB 175 per acre (equivalent to 0.175 to 0.22 pounds active 2,4-DB acid per acre). It is very important to calibrate sprayers before application to be sure you are applying the right amount. Apply from 7 to 10 days before bloom up to mid-bloom, when soybeans are about knee high and growing actively. Soybean foliage should be dark green indicating nodulation and nitrification are already underway. Do not apply over-all sprays earlier than this stage of growth.

Important - Midwest:

Cocklebur must form a protective canopy over the bean plants before spraying or injury to the soybeans may result. Application after mid-bloom may affect flowering and reduce soybean yields.

Apply as a broadcast spray. Use a boom sprayer with flat fan-type nozzles. Space nozzles so that one nozzle is over each row and over each middle. Adjust the height of the boom above the crop to give complete coverage of all weeds. Use low pressure (20-40 psi). Do not use boom jet nozzles.

For a time, soybeans will show some effects from the chemical in the form of temporary twisting or curling of the stems and leaves. However, these effects disappear in about 3 to 5 days. Cocklebur will die out in from 3 days to 3 weeks.

6.

DIRECTED BAND APPLICATIONS:

For control of cocklebur and morningglory, apply the equivalent to 0.8 to 1.0 pint of 2,4-DB 175 per broadcast acre (equivalent to 0.175 to 0.22 pounds active 2,4-DB acid per acre). Use sufficient water for good coverage; at least 10 gallons per acre. Treat when beans are at least 8 inches tall. Adjust nozzle height to allow spray to contact no more than the bottom one-third of soybean plants. Do not allow spray drift to contact growing terminals of beans, as excessive crop injury will result. For best results, treat when the cocklebur and morningglory are no more than 3 inches tall. All leaves and growing terminals of weeds should be contacted by the spray. For control of weeds one inch or less in height and/or suppression of weeds greater than about one inch in height such as velvetleaf, jimsonweed, common ragweed and lambsquarters, apply 1.6 to 1.8 pints of 2,4-DB 175 per acre (equivalent to 0.35 to .40 lb. active 2,4-DB acid per acre). Do not use more than two applications per season. Stunting of the soybeans may be observed when two applications of the higher rates are used for weed control. To insure proper placement of spray on lower one-third of soybean plants, apply with sprayer nozzles mounted on skid shoes, oiling shoes, or cultivators with gauge wheels. Do not mount on booms with drop nozzles, or on cultivators without gauge wheels. Use fan type nozzles tips #8001 or larger, or their equivalent. Nozzle pressure should be less than 40 psi to reduce spray drift.

7.

DIRECTED BAND APPLICATIONS OF MIXTURES OF 2,4-DB 175 and LOROX 50W*

For control of cocklebur, morningglory, sesbania, velvetleaf, lambsquarter, prickly sida (teaweed), jimsonweed, ragweed, and crabgrass (2 leaf), apply 1.0 pint of 2,4-DB plus 1 lb. Lorox per broadcast acre (equivalent to 0.22 pounds active 2,4-DB and 1/2 lb. Linuron active per acre). Use a proportional amount of the two chemicals on the band. (For example, on a 12 inch band in 36 inch rows, use 1/3 pt. of 2,4-DB 175 and 1/3 lb. of Lorox per acre). Use an # 8022 T-Jet (or equivalent) or larger with a minimum of 25 gallons per broadcast acre and spray pressure of 20 to 25 psi, to avoid spray drift. One pint of surfactant such as DuPont WK per 2.5 gallons of spray mix 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 screens should be equal to or larger than 50 mesh. Apply directed spray when beans are at least 8 inches tall and when weeds do not exceed 2 inches in height. Adjust nozzle height to spray the lower one-third of the Soybean plant. 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. If a new flush of weeds occurs 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 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.

8.

NOTE:

Do not use on sands, loamy sands or gravelly soils or on exposed subsoils. Do not use on soils less than 1/2% organic matter as crop injury may result. Lorox 50W* is a registered trademark of E.I. DuPont de Nemours & Co. (Inc.)

PEANUTS

RESTRICTIONS AND LIMITATIONS:

Do not feed treated vines and peanut hay to livestock. Do not apply if peanuts are under stress from drought as injury to peanuts may occur.

For best results, apply 2,4-DB 175 when the weeds are one or two inches in size. For ground application, use 10 to 30 gallons of spray solution per acre. For air application, use 5 gallons of spray solution per acre.

Georgia, Virginia, North Carolina, Alabama, Florida, Arkansas: Apply 0.9 to 1.1 pints (equivalent to 0.2 to 0.25 pounds active 2,4-DB acid) of 2,4-DB 175 per acre on peanuts 2 to 12 weeks after planting. For late germinating cocklebur and morningglory, apply a second application about 3 weeks after the first application. In Virginia-Carolina area, do not apply later than 45 days before harvest.

Oklahoma, Texas and New Mexico: Apply 0.9 to 1.8 pints (0.2 to 0.4 pounds active 2,4-DB acid) of 2,4-DB 175 per acre. Use the low rate on morninglory and cocklebur up to 12 inches in size. Use the higher rate on other weeds. 2,4-DB 175 may be applied twice during the season. For best suppression of sida, space the treatments 14 days apart. The second application should not be made later than 100 days after planting or 30 days before harvest.

9.

AMOUNT OF 2,4-DB 175 TO USE

ACREAGE TO SPRAY	@ 0.2lb./A ACTIVE	@ 0.4lb./A ACTIVE
1 8.75	0.9 pt. or 14.6 ozs. 1 gallon	1.8 pts. or 28.0 ozs. 2 gallon

NOTICE:

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller and Buyer assumes the risk of any such use.

Material Safety Data Sheet
2, 4-DB DIMETHYLAMINE SALT (2, 4-DB 175)

ACETO CORPORATION

One Hollow Lane
 Lake Success, NY 11042-1215
 Phone: (516) 627-6000 Fax: (516) 627-6093

DATE PREPARED:..... MAY 2001
 REVISION DATE:
 REVISED BY: SIMONE YEARWOOD
 CHEMTREC: 800-424-9300
 PRODUCT NUMBER: 21086

SECTION 1 - IDENTIFICATION

PRODUCT NAME:2, 4-DB DIMETHYLAMINE SALT (2, 4-DB 175)
 SYNONYMS:.....BUTANOIC ACID, 4-(2,4-DICHLOROPHENOXY)-, COMPD. WITH N-METHYLMETHANAMINE (1:1); BUTOXONE
 FORMULA:C₁₂H₁₇Cl₂NO₃
 CAS NUMBER:2758-42-1

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	PERCENT	CAS NUMBER
4-(2,4-Dichlorophenoxy) Butyric Acid	23%	2758-42-1
Formulation Acids	77%	N/A

SECTION 3 - HAZARD IDENTIFICATION**EMERGENCY OVERVIEW:**

.....Clear brown liquid with ammonia/amine-like odor.
Harmful.
Irritant.

POTENTIAL HEALTH EFFECTS:

.....**Inhalation:** Harmful by inhalation. Material is irritating to the mucous membranes and upper respiratory tract.

.....**Eye Contact:** Material causes irreversible eye damage, seen as corneal opacity. May cause severe pain and corneal injury

.....**Skin Contact:** May be fatal by skin absorption. Material causes skin irritation. May lead to nausea, abdominal pain, muscle weakness, myotonia and a drop in blood pressure.

.....**Ingestion:** May be fatal by ingestion. May cause nausea, abdominal pain, muscle weakness, myotonia and a drop in blood pressure. May cause burns to the gastroesophageal tract.

Overview: May be fatal by ingestion or skin absorption. Harmful by inhalation. Vapor or spray is irritating to the eyes, skin, mucous membranes and upper respiratory tract. Irritant. Product may cause severe eye pain and corneal injury. Skin absorption may lead to nausea, abdominal pain, muscle weakness, myotonia and fall in blood pressure. May cause burns of mouth, throat, esophagus. Repeated overexposure may cause liver, kidney, gastrointestinal and muscular effects. Skin irritation may be aggravated in persons with existing skin lesions. Breathing of vapor or sprays (mists) may aggravate acute or chronic asthma and inflammatory or fibrotic pulmonary disease.

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Toxicity:LD₅₀ (oral, rat): 1706 mg/kg

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult give oxygen. Get medical attention.

EYES CONTACT: Immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Seek medical consultation immediately, preferably an ophthalmologist.

SKIN CONTACT: Immediately wash skin with soap and copious amounts of water while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse.

INGESTION: Wash mouth out with water and get medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE - FIGHTING MEASURES

FLASHPOINT:

No information.

FLAMMABLE LIMITS:

LEL N/A

UEL N/A

AUTOIGNITION TEMPERATURE:

No information

EXTINGUISHING MEDIA:

Water Spray, Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL FIRE FIGHTING PROCEDURES:

If excessive smoke or fumes are encountered, wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE/EXPLOSION HAZARDS:

Emits toxic fumes of ammonia, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, nitrites, cyanic acids, isocyanates, cyanogens, nitrosamines, amides and carbonates.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

WASTE DISPOSAL: Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations.

.....Incinerate pesticide or triple rinsate that cannot be used according to label directions and contaminated diking material in a permitted facility according to current local, state and federal regulations.

SPILLS OR LEAKS:

.....Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

.....Contain spill by diking with dirt, sand or other absorbent material. Rope off contaminated area.

.....Ventilate area and wash spill site after material pickup is complete.

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SECTION 7 - HANDLING AND STORAGE

RESPIRATORY PROTECTION: NIOSH/MSHA-approved respirator

PROTECTIVE CLOTHING: Chemical-resistant gloves, chemical safety goggles, and other protective clothing.

ADDITIONAL MEASURES: Safety shower and eye bath. Use only in a well ventilated area. Do not inhale. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Wash contaminated clothing before wearing again. Harmful liquid. Irritant. Keep containers tightly closed. Store in a cool dry place.

SECTION 8 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear brown liquid with ammonia/amine-like odor.

BOILING POINT: >212°F (100°C) at 760 mmHg

MELTING POINT: 117°C - 119°C

VAPOR PRESSURE: <1mmHg

VAPOR DENSITY (AIR=1): No Information

SPECIFIC GRAVITY: 1.075

SOLUBILITY IN WATER: 100% soluble, miscible.

REACTIVITY IN WATER: No information.

SECTION 9 - STABILITY AND REACTIVITY DATA

STABILITY: Stable.

INCOMPATIBILITY: Acids, oxidants, mercury, nitrous acids, nitrates, nitrogen.

HAZARDOUS DECOMPOSITION: Toxic fumes of ammonia, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, nitrites, cyanic acids, isocyanates, cyanogens, nitrosamines, amides and carbonates.

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SECTION 10 - REGULATORY INFORMATION

TSCA= This chemical is NOT listed on the TSCA Inventory. EPA - FIFRA Regulated.

SECTION 11 - TRANSPORTATION DATA

PROPER SHIPPING NAME:	Chemicals, n.o.s.
HAZARD CLASS AND LABEL:	N/A
UN NUMBER:	N/A
PACKAGING:	N/A
SPECIAL PROVISIONS:	N/A

NOTE: We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Aceto Corporation, it is the user's obligation to determine the conditions of safe use of the product.