	U.S. ENV	VIRONMENT	TAL PROTEC	TION	EPA Reg. Number:	Date of Issuance	
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	F PESTICIDI			Term of Issuance:	I		
	Registration						
<u>_x</u> Reregistration (under FIFRA, as amended)				Name of Pesticide Product:			
ne and Address of Registrant (include ZIP Code):			<del>.</del>	Double Up B+D			
elena Chemical		ciude ZIP Cod	e):				
25 Schilling Bo	1 .	e 300					
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					ion must be submitted to always refer to the above		
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5. Per the acute toxicity review and the RED, the glove and apron statements in the handler PPE section must be revised to read:

"- Chemical-resistant gloves except for pilots

- Chemical-resistant apron when mixing or loadinig, cleaning up spills or equipment, or otherwise exposed to the concentrate."

Per the RED, the text "See engineering controls for additional requirements" must be added to the end of the handler PPE section.

6. The following engineering control text must be added to the label:

"Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40CFR 170.240 (d)(6)."

The mechanical transfer engineering control text is no longer needed and may be deleted from the label.

7. The first two sentences of the Environmental Hazard section must be revised to read:

"This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark."

8. Per the Bromoxynil RED, the REI must be revised to 24 hours.

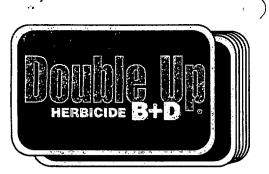
9. The pesticide disposal text must be revised as specified in the product chemistry review.

10. Per the RED, the text "The total cumulative rate should not exceed 2 lbs ai of 2,4-D" appearing on the label must be revised to read "Limited to 1.75 lbs ae per acre per crop cycle."

11. The text "Apply to non-residential turf only. Do not apply to residential, playground, or schoolyard turf" is not appropriate for this product and must be deleted from the label.

A stamped copy of your labeling is enclosed for your records. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after 12 months from the date of this Notice must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Enclosure



# FOR CONTROL OF LISTED BROADLEAF WEEDS IN WHEAT, BARLEY, OATS, TRITICALE AND RYE ACTIVE INGREDIENT:

Octanoic acid ester of bromoxynil (3,5-dibromo-4-

hydroxybenzonitrile)*	30.1%*
Isooctyl (2-ethylhexyl) Ester of 2,4-Dichlorophenoxyacetic	
Acid**	31.2%**
OTHER INGREDIENTS:	
TOTAL:	100.0%

Contains xylene range/petroleum distillates.

\*Bromoxynil octanoate equivalent to 22.9% of bromoxynil or not less than 2.0 pounds of bromoxynil per gallon.

\*\*2,4-Dichlorophenoxyacetic acid equivalent to 20.69% or not less than 1.9 pounds per gallon. Isomer specific by AOAC method.

EPA Est. No. 228-IL-1 EPA Reg. No. 5905-552

SN 1004/0305 Patent No. 6,232,272 NET CONTENTS GALLONS

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION-CAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

For Chemical Spill, Leak, Fire, Exposure or Accident, Call CHEMTREC (800) 424-9300.

For Medical Emergencies Only, Call 877-325-1840.

# FIRST AID

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for • 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

- Call a poison control center or doctor immediately for • treatment advice
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

# IF ON SKIN OR CLOTHING:

Take off contaminated clothing.

Disclaimer: Always refer to the label on the product before using Helena or any other product.

- SPECIMEN LABEL Rinse skin immediately with plenty of water for 15-20 minutes.
  - Call a poison control center or a doctor for treatment advice.

# IF INHALED:

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- Remove person to fresh air. •
  - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment • advice.

# HOT LINE NUMBER

ACCEPTE Have the product container or label with you when Have the product container or label with you w control center or doctor, or going fur treatment. You may also contact a red: 1-800-424-9300 for emergency medical treatment intornation. 7 2009

# MANUFACTURED FOR

HELENA CHEMICAL COMPANY 225 SCHILLING BOULEVARD, SUITE 30-1 **COLLIERVILLE TENNESSEE 38017** 

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

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS **CAUTION - PRECAUCION**

Harmful if swallowed or absorbed through skin. Causes moderate eye damage. Avoid contact with skin, eyes or clothing.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are barrier laminate, butvl rubber, nitrile rubber or viton. If you want more options, follow the instructions for category G on an EPA chemicalresistance category selection chart.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks, plus
- protective eyeware
- chemical resistant gloves, when applying postharvest dips or sprays to citrus, applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- chemical resistant apron when applying postharvest dips or sprays to citrus, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the 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.

# SPECIMEN LABEL

If you will handle a total of 60 gallons or more of this product per day, you must use a mechanical transfer system for all mixing and loading operations. If this product is packaged in a 30 gallon drum, you must us a mechanical transfer system which terminates in a drip-free hard coupling which may be used only with a spray or mix tank which has been fitted with a compatible coupling. If you do not presently own or have access to a mechanical transfer system with this type of coupling, contact your dealer for information on how to obtain such a system or to modify your present system. When using a mechanical transfer system, do not remove or disconnect the pump or probe from the container until the container has been emptied and rinsed. The pump or probe system must be used to rinse the empty container and to transfer the rinsate directly to the mixing or spray tank.

To reduce exposure to residues, wash the spray rig, tractor, and all other equipment used to handle or apply this product with water daily or before using the equipment for any other purpose.

APPLICATION BY CHEMIGATION must be done by fixed pipe, overhead sprinkler systems or hand moved pipe. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed vehicle.

DURING AERIAL APPLICATIONS, human flaggers are prohibited unless in enclosed vehicles. Aerial application is prohibited within 300 feet of residential areas (e.g., homes, schools, hospitals, shopping areas, etc.)

Apply to non-residential turf only. Do not apply to residential, playground, or schoolyard turf.Do not apply with back pack or handheld application equipment.

# USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- 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 pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is

Disclaimer: Always refer to the label on the product before using Helena or any other product.

shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

# DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

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.

# 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). For all crops on this label the REI is 12 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 over a long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, shoes plus socks and protective eyewear.

# PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not store near fertilizers or seeds. Store at temperatures above 32° F. If allowed to freeze, remix before using.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

RETURNABLE – REFILLABLE CONTAINERS: This material may be repackaged in 15 or 30 gallon returnable-refillable containers by Helena or a registered establishment under contract to Helena. After use, return the container to the point of purchase or designated locations. This container must only be refilled with **DOUBLE UP® B+D** Herbicide. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

# **GENERAL INFORMATION**

DOUBLE UP® B+D is formulated as an emulsifiable concentrate of octanoic acid ester of bromoxynil containing the equivalent of 2 pounds of bromoxynil per gallon and 2,4-Dichlorophenoxyacetic acid containing the equivalent of 1.9 pounds per gallon. DOUBLE UP® B+D is a selective postemergence herbicide for control of important broadleaf weeds infesting small grains wheat, barley, oats, rye and triticale. Optimum weed control is obtained when DOUBLE UP® B+D is applied to actively growing weed seedlings. DOUBLE UP® B+D contains a contact herbicide and a systemic herbicide, therefore thorough coverage of the weed seedlings is essential for optimum control.

DOUBLE UP® B+D has little residual activity. Therefore subsequent flushes of weeds will not be controlled by the initial treatment. Generally crops that form a good canopy will help shade subsequent weed flushes. However, certain crops or short-straw varieties, for example Yaccora Rojo wheat, may not develop the crop canopy fast enough to shade the subsequent flushes of weeds.

Occasional transitory leaf burn may occur. The temporary leaf burn is similar to that seen with liquid fertilizer. Recovery of the crop is generally rapid with no lasting effect. Frequency and amount of leaf burn may be greater when crops are stressed by abrasive winds, cool to cold evening temperatures or mechanical injury, such as that caused by hail, sleet or insect feeding. To reduce the potential for temporary leaf burn, applications should be made to dry foliage in the recommended spray volumes per acre when weather conditions are not extreme.

# **GROUND APPLICATION**

Use a standard herbicide boom sprayer that provides uniform and accurate application. Sprayer should be equipped with screens no finer than 50 mesh in the nozzle tips and in-line strainers.

Select a spray volume and delivery system that will ensure thorough and uniform spray coverage. For optimum spray distribution and thorough coverage use of flat fan nozzles (maximum tip size 8008) with a spray pressure of 40-60 psi are recommended. Other nozzle types and lower spray pressures that produce coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control. Raindrop® nozzles and flood nozzles are not recommended as weed control with **DOUBLE UP® B+D** may be reduced.

In general, a spray volume of 10 to 20 gallons per acre (GPA) is recommended for optimum spray coverage. A minimum of 5 GPA with a minimum spray pressure of 50 psi and a maximum ground speed of 10 mph may be used with higher speed, low volume ground

Disclaimer: Always refer to the label on the product before using Helena or any other product.

application if ground terrain, crop and weed density allow effective spray distribution. When using higher speed equipment, a maximum ground speed of 10 mph is suggested if field conditions cause excessive boom movement during application which results in poor spray coverage. Ground applications made when dry, dusty field conditions exist may provide reduced weed control in wheel track areas. Applications using less than 10 gallons per acre may result in reduced weed control.

When weed infestations are heavy, use of higher spray volumes and spray pressure will be helpful in obtaining uniform weed coverage. When corn or grain sorghum are large enough to interfere with the spray pattern, drop nozzles should be used to obtain uniform weed coverage. If you are unsure of the infestation level or size of crop, consult your local extension service.

Do not apply when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement.

### USER PRECAUTIONS

Avoid use of small diameter spray nozzles. Avoid spray drifts onto susceptible plants such as vegetables, flowers, tomatoes, beans, sugarbeets, sunflowers, and other legumes. Coarse sprays are less likely to drift. Do not spray at all in the vicinity near susceptible plants to prevent any vapor drift. Local conditions may affect the use of herbicides. State agricultural authorities in many states issue recommendations to fit local conditions. Be sure that the use of this product conforms to all applicable conditions.

If tank mixing, a compatibility test is recommended to ensure satisfactory spray preparation. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing. To ensure maximum crop safety and weed control, follow all cautions and limitations on this label and the labels of products used in the tank mixture.

#### **AERIAL APPLICATION**

Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage. In general a minimum spray volume of 5 GPA and a maximum pressure of 40 psi are recommended.

Do not apply during inversion conditions, when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement. Off target spray movement can be minimized by increasing the spray volume per acre and not applying when winds exceed 10 mph.

# SPRAY DRIFT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

#### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), omamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

#### Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

Disclaimer: Always refer to the label on the product before using Helena or any other product.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

# FOR THE CONTROL OF LISTED BRAODLEAF WEEDS IN WHEAT, BARLEY, OATS, TRITICALE AND RYE

Use ¾ to 2 pints of this herbicide per acre in enough spray volume to provide uniform coverage of weeds, usually 10-20 gallons per acre by ground equipment and 5 gallons by aircraft. Application should be made to cereal grains from the fully tillered stage of growth but before the jointing stage. Use the 2 pint rate for mustards, pigweed and wild buckwheat. Use the 2 pint rate for kochia and tansy mustard or when weeds are growing under cool dry conditions. Heavy weed populations require a higher rate and complete spray coverage.

- This product controls the following weeds: mustards, frenchweed, nightshade, arrowhead, field bindweed, gumweed, pigweed,
- ragweed, wild buckwheat, plantain, sunflower, canola, cow cockle, Russian thistle, annual smartweed, lambsquarter and other broadleaf weeds. Apply to weeds up to the 4 leaf stage or 2 inches in height, whichever comes first.

#### **RESTRICTIONS AND PRECAUTIONS**

Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 45 days after treatment.

Do not apply when crop canopy covers the weeds as poor weed control will result.

Do not apply when crops are under moisture stress.

Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures.

Do not plant rotational crops within 30 days following application. The total cumulative rate should not exceed 2 lbs. ai. of 2,4-D. Do not feed treated straw to livestock.

The preharvest interval (PHI) is 14 days.

#### Postemergence:

Limited to one postemergence application per crop cycle. Maximum of 5 pints /acre per application.

#### Preharvest:

Limited to one preharvest application per crop cycle. Maximum of 2 pints /acre per application.

# CONDITIONS OF SALE - LIMITED WARRANTY

AND LIMITATIONS OF LIABILITY AND REMEDIES Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded. The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

- 1. Refund of the purchase price paid by buyer or user for product bought, or
- 2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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