

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 21, 2022

Bill Washburn Registration Manager Helena Agri-Enterprises, LLC d/b/a Helena Chemical Company 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

Subject: Registration Review Label Amendments Incorporating Mitigation from the National Marine Fisheries Services (NMFS) Biological Opinions on the Effects of Bromoxynil on Pacific Salmonids *Product Name*: DOUBLE UP B+D *EPA Registration Number*: 5905-552 *Application Date*: 7/30/2021 *Decision Number*: 577443

Dear Bill Washburn:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the NMFS' Biological Opinion on the effects of Bromoxynil on Pacific salmonids. The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only

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distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Quinn Gavin at gavin.quinn@epa.gov.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

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Dec 21, 2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5905-552

BROMOXYNIL	GROUP	6	HERBICIDE
·			

2,4-D GROUP 4 HERBICIDE

DOUBLE UP B+D HERBICIDE

FOR CONTROL OF LISTED BROADLEAF WEEDS IN CEREAL GRAINS (WHEAT, BARLEY, OATS, TRITICALE AND RYE), CORN (FIELD CORN AND POPCORN), SORGHUM (GRAIN AND FORAGE), FALLOWLAND AND CONSERVATION RESERVE (CRP) ACRES

ACTIVE INGREDIENTS:

Octanoic acid ester of bromoxynil (3,5-dibromo-4-hydroxybenzonitrile)*	30.1%*
Isooctyl (2-ethylhexyl) Ester of 2,4-Dichlorophenoxyacetic Acid**	
OTHER INGREDIENTS:	
TOTAL:	
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. Patent No. 6,232,272

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.)

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

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

For Medical Emergencies, Call CHEMTREC (800) 424-9300.

	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 for treatment advice.
	 Do not give any liquid to the person.
	 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.
	 Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or a doctor for treatment advice.
IF INHALED:	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
	bel with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-
9300 for emergency medical tre	atment information.
	NOTE TO PHYSICIAN

May pose an aspiration pneumonia hazard. Contains petroleum distillate.

EPA Reg. No. 5905-552 EPA Est. No. 228-IL-1 AD 063021 NET CONTENTS_____GALLONS

PHerbicide

MANUFACTURED FOR HELENA AGRI-ENTERPRISES, LLC 225 SCHILLING BOULEVARD, SUITE 300 COLLIERVILLE, TN 38017

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION - PRECAUCION

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixer, loader, applicators, flaggers, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks, plus
- protective eyewear
- chemical resistant gloves (except for pilots), made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils or Viton
- Chemical resistant apron when 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.

See engineering controls for additional requirements.

Engineering Controls

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

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

Handlers must use closed mixing loading systems during mixing/loading liquids for aerial applications to fallow land and high-acreage field crops.

DURING AERIAL APPLICATION, Aerial application is prohibited within 300 feet of residential areas (e.g., homes, schools, playgrounds, hospitals, shopping areas, etc.)

Aerial application to fallow land is restricted within 25 feet of residential areas (e.g., homes, schools, playgrounds, shopping areas, hospitals, etc.).

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. If pesticide gets on skin, wash immediately wit 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 is toxic to wildlife, 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters 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 shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 901-761-0050.

Non-Target Organism Advisory Statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.

Do not apply with backpack or hand-held application equipment.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al, v. EPA C01-0143C (W.D. WA). For further information, please refer to www.epa.gov/espp.

Endangered Species Protection Requirements:

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

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 24 hours.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for corn.

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 barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils or Viton, shoes plus socks and protective eyewear.

PRODUCT 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 listed 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 listed weed seedlings is essential for optimum control.

DOUBLE UP® B+D has little residual activity. Therefore subsequent flushes of listed 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.

Filename: Double Up B+D (5905-552) 073021 CLN.doc

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 specified spray volumes per acre when weather conditions are not extreme.

TANK MIXES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

COMPATIBILITY

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, it is advisable to determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. TO THE EXTENT ALLOWED BY APPLICABLE LAW, ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

This product can be applied in combination with sprayable liquid fertilizer or spray additives such as surfactants or crop oil concentrate. When tank mixing with liquid fertilizer, always add the fertilizer to the spray tank first and agitate thoroughly before adding this product. Always predetermine the compatibility with liquid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to ensure that this product is evenly mixed with the fertilizer. Leaf burn may occur when this product is applied with liquid fertilizer, but new leaves are not adversely affected.

NOTICE: Fertilizers and spray additives can increase foliage leaf burn when applied with this product. Do not apply fertilizers or spray additives with this product if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to this product. If this product is mixed with liquid fertilizer, the fertilizer should compose no more than 1/2 the total spray mix.

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 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 listed crops 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.

Spray Drift

Ground Boom Application:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

USER PRECAUTIONS

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.

RESTRICTIONS:

DURING AERIAL APPLICATION, Aerial application is prohibited within 300 feet of residential areas (e.g., homes, schools, playgrounds, hospitals, shopping areas, etc.)

Aerial application to fallow land is restricted within 25 feet of residential areas (e.g., homes, schools, playgrounds, shopping areas, hospitals, etc.)

Spray Drift

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Select a nozzle and pressure that deliver fine or coarser droplets.
- The distance of the outer most nozzles on the boom must not exceed 75% of the length of the wingspan or 90% of the rotor diameter.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

Importance of Droplet Size

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size –Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size –Aircraft

Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets nozzles should be oriented parallel with the airflow in flight.

Boom Height - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

Release Height - Aircraft

Higher release heights increase the potential for spray drift.

Shielded Sprayers

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

Temperature and Humidity

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

Wind

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

RESTRICTIONS:

Engineering Control Statements

Handlers must use closed mixing loading systems during mixing/loading liquids for aerial applications to fallow land and high-acreage field crops.

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.

SPRINKLER IRRIGATION APPLICATION

This product can be applied through sprinkler irrigation systems to Cereal Grains (Wheat, Barley, Oats Triticale and Rye), Corn (Field Corn and Popcorn), and Sorghum (Milo, Grain and Forage).

Apply this product through sprinkler systems including center pivot, lateral move, side (wheel) roll, solid set or hand move irrigation systems only. 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. Do not apply this product through any other type of irrigation system.

SPECIFIC REQUIREMENTS FOR APPLICATION THROUGH AUTOMATED SPRINKLER IRRIGATION SYSTEM

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Do not apply when wind speed favors drift beyond the area intended for treatment.

8. Agitation is recommended in the pesticide supply tank when applying this product.

9. This product should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of this product should be made during the last 30 to 45 minutes of the irrigation set with other overhead sprinkler systems.

10. For best performance, set the sprinkler system to deliver approximately 0.5 inch or less of water per acre.

11. Remove scale, pesticide residues and other foreign matter from the supply tank and entire injector system. Flush with clean water.

12. If this product is diluted in the supply tank, fill the tank with half of the water amount desired, add this product and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part of this product.

13. Start the sprinklers and then inject this product into the irrigation line. This product should be injected with a positive displacement pump into the main line at least 8 feet ahead of a right angle turn to insure adequate mixing. Refer to this product label for detailed information on application rates and timings.

CHEMIGATION USE PRECAUTIONS

- Application of more than 0.5 inch/acre of irrigation water may result in decreased product performance on certain soils.
- Allow sufficient time for pesticide to be flushed through all the lines and nozzles before turning off irrigation water.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

CHEMIGATION USE RESTRICTIONS

- Do not apply when conditions favor drift, when system connections or fittings leak, or when nozzles do not provide uniform distribution.
- Do not apply this product to golf course turf.

WEED RESISTANCE MANAGEMENT

For resistance management, please note that **DOUBLE UP B+D** contains both a Group 6 / Bromoxynil and a Group 4 / 2,4-D herbicide. Any weed population may contain or develop plants naturally resistant to **DOUBLE UP® B+D** and other Group 4 herbicides and Group 6 herbicide. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To delay herbicide resistance take one or more of the following steps:

• Rotate the use of **DOUBLE UP® B+D** or other Group 6 herbicides and Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

• Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

• Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g. higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

• Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

• If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

• Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

• [For further information or to report suspected resistance, contact [Helena Agri-Enterprises contact] at [one of][any of] the following] [[[901-761-0050] [[,][or]] 1-800-345-3330 [[,][or]] [Helena Agri-Enterprises e-mail address].] It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. Do not assume that each listed weed is being controlled by this mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredient in this product.

Suspected herbicide-resistant weeds may be identified by these indicators:

* Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;

- * A spreading patch of non-controlled plants of a particular weed species; and
- * Surviving plants mixed with controlled individuals of the same species.

INTEGRATED PEST MANAGEMENT

Helena Agri-Enterprises recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

WEEDS CONTROLLED

Postemergence application of this product will control the following weeds when sprayed in the seedling stage (generally less than 8 in. height). Use the higher dose of labeled rate ranges to control larger weeds (over 4 in. in height) or weeds listed as susceptible in the following table:

MOST SUSCEPTIBLE BROADLEAF WEED SPECIES

Annual sowthistle Black mustard Black nightshade Common cocklebur Common lambsquarters Common tarweed Cow cockle Cutleaf nightshade Eastern black nightshade Coast fiddleneck Field pennycress Green smartweed Hairy nightshade Horned Poppy Jimsonweed Ladysthumb Lanceleaf sage London rocket Marshelder Pennsylvania smartweed Pepperweed spp. Redroot pigweed Russian thistle Shepherdspurse Silverleaf nightshade Sunflower¹ Tall Waterhemp Tartary buckwheat Tumble mustard Wild buckwheat Wild mustard Yellow rocket

(Sonchus oleraceus) (Brassica nigra) (Solanum nigrum) (Xanthium strumarium) (Chenopodium album) (Hemizonia congesta) (Saponaria vaccaria) (Solanum triflorum) (Solanum ptycanthum) (Amsinckia intermedia) (Thlaspi arvense) (Polygonum scabrum) (Solanum sarachoides) (Glaucium comiculatum) (Datura stramonium) (Polygonum persicaria) (Salvia reflexa) (Sisymbrium irio) (Iva xanthifolia) (Polygonum strumarium) (Lepidium app.) (Amaranthus retroflexus) (Salsola kali) (Capsella bursa-pastoris) (Solanum elaeagnifolium) (Helianthus annuus) (Amaranthus tuberculatus) (Fagopvrum tataricum) (Sisymbrium altissimum) (Polygonum convolvulus) (Sinapis arvensis) (Barbarea vulgaris)

SUSCEPTIBLE BROADLEAF WEED SPECIES Alfalfa Annual Smartweed Arrowhead Bitterweed Blue (purple) mustard Broomweed Buffalobur Burcucumber Canada thistle Canola Common groundsel Common ragweed Corn chamomile Corn gromwell Croton Devils claw Docks Dogbane Field bindweed Frenchweed Fumitory Giant ragweed Gumweed Hemp sesbania Henbit lvyleaf morningglory Knawel Kochia Mayweed Musk thistle Nettle Plantain Prostrate knotweed Puncture vine Redroot pigweed Smooth pigweed Southern wild rose Spiny pigweed Tall morningglory Tall waterhemp Tansy mustard Tansy ragwort Tarweed Velvetleaf Venice mallow Wild garlic Wild onion Wild radish

(Medicago sativa) (Polvgonum pensvlvanicum) (Sagittaria latifolia) (Helenium amarum) (Chlorispora tenella) (Malvastrum coromandelianum) (Solanum rostratum) (Sisyos angulatus) (Cirsium arvense) (Brassica napus) (Senecio vulgaris) (Ambrosia artemisiifolia) (Anthemis arvensis) (Lithospermum arvense) (Codiaeum variegatum) (Harpogophytum procumbens) (Rumex spp.) (Apocynum cannabinum) (Convolvlus arvensis) (Thlaspi arvense) (Fumaria officinalis) (Ambrosia triflda) (Grindelia squarrosa) (Sesbania exaltata) (Lamium amplexicaule) (Ipomoea hederacea) (Scleranthus annuus) (Kochia scoparia) (Anthemis cotula) (Carduus nutans) (Urtica spp.) (Plantago major) (Polygonum aviculare) (Tribulus terrestris) (Amaranthus retroflexus) (Amaranthus hybridus) (Rosa acicularis) (Amaranthus spinosus) (Ipomoea putpurea) (Amaranthus tuberculatus) (Descurainia pinnata) (Senecio jacobaea) (Hemizonia spp.) (Abutilon theophrasti) (Hibiscus trionum) (Allium vineale) (Allium stellatum) (Raphanus raphanistrum)

¹ For control of sunflower, delay application until first sunflower seedlings emerging are 4 inches in height. Weeds germinating after spraying will not be controlled.

CALIFORNIA REGISTRATIONS

Only the following uses referenced in this label are registered for use in California: cereal grains (wheat, barley, oats, rye and triticale), corn (post emergence application only), sorghum (post emergence application only); chemigation in small grains; 2,4-D and MCPA tank mixtures in small grains; 2,4-D and atrazine tank mixtures in corn and sorghum. All applications must be made with a minimum spray volume of 10 GPA by ground or 5 GPA by air equipment.

Pints per Acre / Pounds A.I. per Acre Conversions				
Double Up B+ D	Double Up B+ D Bromoxynil			
Pints per Acre	Pounds A.I. per Acre	Pounds A.I. per Acre		
0.75	0.1875	0.18		
1.0	0.25	0.24		
1.25	0.3125	0.30		
1.5	0.375	0.36		
2.0	0.5	0.48		
3.5	0.875	0.84		
4.0	1.0	0.96		

CORN FIELD CORN AND POPCORN

		RATE	APPLICATION TIMING AN	ID SPECIFIC DIRECTIONS
PRODUCT	APPLICATION	pints/acre (ounce/acre)	CROP	WEEDS AND INSTRUCTIONS
Double Up B + D	Preplant	1.0 to 1.5 (16 to 24)	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting.	Use the higher rate for control of less susceptible weeds or cover crops such as alfalfa.
Double Up B + D	Preemergence	1.0 to 1.5 (16 to 24)	Plant corn as deep as practical	Apply product to emerged weeds from 3 to 5 days after planting but before corn emerges. Product will not control weeds which have not emerged.
Double Up B + D	Emergent	1.0 (16)	Apply to corn after emergence to the 3-leaf stage but prior to tassel emergence.	Apply in 5 to 30 gallons of water per acre ground application, 1 to 5 gallons of water by air.
Double Up B + D	Postemergence Average Condition	1.0	Apply to corn after 4-leaf stage but prior to tassel emergence.	Best results are usually obtained when weeds are small and corn is 4 to 12 inches tall.
	Average condition	(16)	Use drop nozzles if crop is taller than 8 inches.	For Canada thistle burndown and Field bindweed suppression up to the mid-bloom stage, use the
	Dry Condition*	1.5 (24)	Apply to field corn between the 4- leaf stage + but prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches.	higher rate. If corn is growing rapidly and temperature and soil moisture is high, use 0.5 pint per acre to reduce possibility of crop damage. Application rates of up to 1.5 pint per acre may be used to
				control some hard-to-control weeds. However, the possibility of injury to the corn is increased.
Double Up B + D + Atrazine **	Postemergence Average Conditions	0.75 (12) + 1/2 to 1-1/5 lb ai/A	Apply to field corn after emergence but before the corn is 12 inches tall. As soon as corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible; direct spray over tops of weeds but not over the corn.	Best results are usually obtained when weeds are small and corn is 4 to 12 inches tall. For improved devils claw and field bindweed suppression use the higher rate. If corn is growing rapidly and temperature and soil moisture is high, use 0.5 pint per acre to
	Dry Conditions*	1.5 (24) + 1/2 to 1-1/5 lb ai/A	Apply to field corn between the 4- leaf stage but before the corn is 12 inches tall. As soon as corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible; direct spray over tops of weeds but not over the corn.	reduce possibility of crop damage. Application rates of up to 1.5 pint per acre may be used to control some hard-to-control weeds. However, the possibility of injury to the corn is increased.

DIRECTIONS FOR CORN: Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed production inbred lines to this product. Addition of a spray additive or mixture with liquid fertilizers may cause excessive crop leafburn. Postemergence application prior to the 4-leaf growth stage of corn may result in increased crop leaf burn. Tank mixtures with nonionic surfactant, oil concentrate, nitrogen fertilizer solution or other adjuvants may result in increased initial crop leaf burn. Special care should be taken when using this product and dicamba or 2,4-D tank mixtures to avoid off target drift to sensitive crops. Tank mixtures with 2,4-D or dicamba can cause stalk brittleness to field corn. Winds or cultivation may cause breakage while crop is brittle.

* For Western States – Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming Filename: Double Up B+D (5905-552) 073021 CLN.doc

** ATRAZINE TANK MIX RESTRICTIONS

Atrazine is a Restricted Use Herbicide due to groundwater concerns; users must read and follow all precautionary statements and instructions on the atrazine label in order to minimize the potential for atrazine to reach groundwater. For postemergent applications with Atrazine, do not use nonionic surfactant or crop oil concentrate with this product.

RESTRICTIONS FOR USE ON CORN (FIELD CORN AND POPCORN):

- Do not cut crop for feed, fodder or graze within 45 days of application.
- Do not plant rotational crops within 30 days following product application.
- The preharvest interval (PHI) is 7 days.
- Do not cultivate for 2 weeks after treatment while corn is brittle.
- Do not apply this product to postemergence to seed corn inbreds or popcorn prior to the 3-leaf stage of crop growth as excessive crop leaf burn may occur.
- Do not exceed 2.0 pints of this product (0.5 lb/A bromoxynil).
- Do not apply the this product with an imazethapyr tank mix except to field corn hybrids known to possess resistance to imazethapyr, or severe crop injury may result.
- Do not apply this product on Sweet Corn.

RESTRICTIONS - Preplant or Preemergence:

- Limited to one preplant or preemergence application per crop cycle.
- Do not apply more than 1.0 lbs 2,4-D per acre per year.
- Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth.

RESTRICTIONS - Emergent:

- Limited to one postemergence application per crop cycle.
- Do not apply more than 0.5 lbs 2,4-D per acre per year.

RESTRICTIONS - Postemergence:

- Limited to one postemergence application per crop cycle.
- Do not apply more than 0.5 lbs 2,4-D per acre per year.
- Do not apply from tasseling to dough stage.

RESTRICTIONS - Preharvest:

- Do not use on sweet corn.
- Limited to one preharvest application per crop cycle.
- Do not apply more than 1.5 lbs 2,4-D per acre per year.

SORGHUM [GRAIN AND FORAGE]

	RATE	APPLICATION TIMING A	ND SPECIFIC DIRECTIONS
PRODUCT	pints/acre	0000	
PRODUCT	(ounce/acre)	CROP	WEEDS
Double Up B + D	1.0 (16)	Apply to sorghum between the 3- leaf stage but prior to the preboot stage (growth stage 4) or 15 inches in height, whichever comes first.	For Canada thistle burndown and field bindweed suppression up to the midbloom stage, tank mix an additional use 1/16 to 1/8 lb
		Use drop nozzles if crop is taller than 8 inches.	ai/A of 2,4-D with Double Up B + D.
	1.5 (24)	Apply to sorghum between the 4-leaf stage but prior to the preboot stage (growth stage 4) or 15 inches in height, whichever comes first. Use drop nozzles if crop is taller than 8 inches.	
Double Up B + D	1.0 (16)	Apply to sorghum between the 3-leaf stage but prior to the preboot stage (growth stage 4)	All weeds controlled by Double Up B + D + atrazine tank mixtures at listed rates of
+	+	or 12 inches in height, whichever comes first.	application plus improved devils claw control.
Atrazine**	1/2 to 1-1/5 lb ai/A	Use drop nozzles if crop is taller than 8 inches	For Canada thistle burndown and field bindweed suppression, use 1/16 to 1/8 lb
	1.5	Apply to sorghum between the 4-leaf stage	ai/A of 2,4-D with Double Up B + D.
	(24)	but prior to the preboot stage (growth stage 4)	
	. ,	or 12 inches in height, whichever comes first.	
	+		
		Use drop nozzles if crop is taller than 8	
	1/2 to 1-1/5 lb ai/A	inches.	

DIRECTIONS FOR SORGHUM (GRAIN AND FORAGE): Reduced weed control may occur when weeds are stressed from lack of moisture or color temperatures. Heavy weed populations require a higher rate and complete spray coverage.

Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft.

Refer to labels of products used in tank mixture for additional restrictions and precautions. See **TANK MIXTURE DIRECTIONS section for** additional information.

** ATRAZINE TANK MIX RESTRICTIONS

Atrazine is a Restricted Use Herbicide due to groundwater concerns; users must read and follow all precautionary statements and instructions on the atrazine label in order to minimize the potential for atrazine to reach groundwater. For postemergent applications with Atrazine, do not use nonionic surfactant or crop oil concentrate with this product.

RESTRICTIONS FOR USE ON SORGHUM (GRAIN AND FORAGE):

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to sorghum between the 3-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (2.0 pints) of this product) per acre per year.
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year.

PRECAUTIONS FOR USE ON SORGHUM (GRAIN AND FORAGE):

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 12 ounces per acre) increase the risk of sorghum injury and should be used only where the weed control problem justifies the potential risk of crop damage.

CEREAL GRAINS WHEAT, BARLEY, RYE AND TRITICALE

RATE	APPLICATION TIMING AND SPECIFIC DIRECTIONS		
pints/acre (ounce/acre)	CROP	WEEDS	
1.0 (16)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	MOST SUSCEPTIBLE BROADLEAF WEEDS: Apply to weeds up to the 8 leaf stage or 4 inches in height, whichever comes first. If weeds forms rosette, apply before weeds exceeds 2 inches in diameter.	
1.25 - 1.5 (20 - 24)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	SUSCEPTIBLE BROADLEAF WEEDS: Apply to weeds up to the 4 leaf stage or 2 inches in height, whichever comes first. If weeds forms rosette, apply before weeds exceeds 1 inches in diameter.	
1.5 (24)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	Apply to henbit, knawel and mayweeds up to 4 leaf stage or 2 inches in height, whichever comes first. Apply to kochia and tansy mustard for improved control when these weeds exceed the recommended stage of growth under cool dry conditions.	
Chemigation Only 1.5 (24)	Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Apply through automated sprinkler systems with mechanical transfer loading system only. See APPLICATION BY CHEMIGATION & SPRINKLER IRRIGATION APPLICATION Sections for details.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE broadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.	
	pints/acre (ounce/acre) 1.0 (16) 1.25 - 1.5 (20 - 24) 1.5 (24) Chemigation Only 1.5	pints/acre (ounce/acre)CROP1.0 (16)Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.25 - 1.5 (20 - 24)Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.5 (20 - 24)Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.5 (24)Apply to wheat, barley, rye and triticale throughout the United States. Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.5 (24)Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.5 (24)Apply to wheat, barley, rye and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.1.5 (24)Second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the	

DIRECTIONS FOR CEREAL GRAINS - WHEAT, BARLEY, RYE AND TRITICALE: Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Heavy weed populations require a higher rate and complete spray coverage.

Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft.

Refer to labels of products used in tank mixture for additional restrictions and precautions. See **CEREAL GRAIN TANK MIXTURE DIRECTIONS** section for additional information.

RESTRICTIONS FOR USE ON CEREAL GRAINS - WHEAT, BARLEY, RYE AND TRITACALE:

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to cereal grains that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0).
- Do not apply if the tip of the flag leaf is visible in the whorl.
- Refer to labels of products used in tank mixture for additional restrictions and precautions.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.

- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (32.0 oz [2.0 pints] of this product) per acre per year .
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year .

PRECAUTIONS FOR USE ON CEREALS (WHEAT, BARLEY, RYE AND TRITICALE):

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 12.8 ounces per acre) increase the risk of cereal injury and should be used only where the weed control problem justifies the potential risk of grain damage.

	RATE	APPLICATION TIMING AND SPECIFIC DIRECTIONS			
PRODUCT (ounce/acre)		CROP	WEEDS		
Double Up B + D	Spring Seeded Oats 0.75 (12) Fall Seeded Oats 0.75 to 1.0 (12 to 16)	Apply to oats that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	Apply to weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.		
	Chemigation Only 1.5 (24)	Apply to oats that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE broadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.		
		Apply through automated sprinkler systems with mechanical transfer loading system only. See APPLICATION BY CHEMIGATION & SPRINKLER IRRIGATION APPLICATION			
		Sections for details. duced weed control may occur when weeds are	atraccad from look of mainture or cold		

OATS

DIRECTIONS FOR CEREAL GRAINS - OATS: Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures. Heavy weed populations require a higher rate and complete spray coverage.

Apply with enough spray volume to provide uniform coverage of weeds, usually 10 to 20 gallons per acre by ground equipment and 5 gallons by aircraft.

Refer to labels of products used in tank mixture for additional restrictions and precautions. See **CEREAL GRAIN TANK MIXTURE DIRECTIONS** section for additional information.

RESTRICTIONS FOR USE ON OATS:

- Do not graze treated fields within 45 days after application of this product.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor control will result.
- Apply to cereal grains that are well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0).
- Do not apply if the tip of the flag leaf is visible in the whorl.
- Do not plant rotational crops within 30 days following application of this product.
- The preharvest interval (PHI) is 7 days.
- Do not make more than one preharvest application per crop cycle.
- The total cumulative rate must not exceed 0.5 lbs ai. bromoxynil (25.6 oz [1.6 pints] of this product) per acre per year.
- The total cumulative rate must not exceed 2 lbs. ai. of 2,4-D per acre per year.

PRECAUTIONS FOR USE ON OATS:

- Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. Do not use if the potential for crop injury is not acceptable.
- The higher rates (greater than 9.6 ounces per acre) increase the risk of cereal injury and should be used only where the weed control problem justifies the potential risk of grain damage.

TANK MIXTURE DIRECTIONS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

RATE		APPLICATION TIMING AND SPECIFIC DIRECTIONS		
	pints/acre			
PRODUCT	(ounce/acre)	CROP	WEEDS	
Double Up B + D	1.0 to 1.5	Apply to wheat, barley, triticale,	For control of MOST SUSCEPTIBLE	
	(16 to 24)	oats and rye that is well tillered	and SUSCEPTIBLE weeds as listed on	
+		(Feekes 3.0) through mid-jointing	this label and improved control of	
	+	(second node visible, Feekes 7.0).	redroot pigweed and kochia. Apply to	
MCPA ester herbicide	Refer to MCPA ester label	Do not apply if the tip of the flag	weeds up to the 8 leaf stage, 3 inches in	
		leaf is visible in the whorl.	height or 2 inches in diameter,	
			whichever comes first. Apply to kochia	
			and redroot pigweed up to 2 inches in	
			height or diameter.	
Double Up B + D	1.0 to 2.0	Apply to wheat and barley that is	This tank mix improves control of	
	(16 to 32)	well tillered (Feekes 3.0) through	broadleaf weeds such as henbit, tansy	
+ chlorsulfuron herbicide		mid-jointing (second node visible,	mustard and chickweed. Apply to weeds	
chlorsulturon herbicide	+ Refer to chlorsulfuron label	Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the	up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever	
	Refer to chiorsulturon laber	whorl.	comes first.	
Nonionic surfactant		whom.	comes mst.	
	1 to 2 qt/100 gal of water			
Double Up B + D	1.0 to 2.0	Apply to wheat and barley that is	This tank mix improves control of	
	(16 to 32)	well tillered (Feekes 3.0) through	broadleaf weeds such as henbit, tansy	
+		mid-jointing (second node visible,	mustard and chickweed. Apply to weeds	
chlorsulfuron plus metsulfuron-	+	Feekes 7.0). Do not apply if the tip	up to the 8-leaf stage, 4 inches in height	
methyl herbicide	Refer to chlorsulfuron plus	of the flag leaf is visible in the	or 2 inches in diameter, whichever	
	metsulfuron-methyl labels	whorl.	comes first.	
+	+			
Nonionic surfactant	1 to 2 qt/100 gal of water			
Double Up B + D	1.0 to 2.0	Apply to wheat and barley that is	This tank mix improves control of	
	(16 to 32)	well tillered (Feekes 3.0) through	broadleaf weeds such as henbit, tansy	
		mid-jointing (second node visible,	mustard and chickweed. Apply to weeds	
+	+	Feekes 7.0). Do not apply if the tip	up to the 8-leaf stage, 4 inches in height	
metsulfuron-methyl herbicide	Refer to metsulfuron-methyl	of the flag leaf is visible in the	or 2 inches in diameter, whichever	
	label	whorl.	comes first.	
+ Nonionic surfactant	+ 1 to 2 at/100 apl of water			
Nonionic surfactant	1 to 2 qt/100 gal of water			

	RATE	APPLICATION TIMING	AND SPECIFIC DIRECTIONS
PRODUCT	pints/acre	0000	WEEDO
PRODUCT	(ounce/acre)	CROP	WEEDS
Double Up B + D + dicamba dimethylamine salt herbicide	1.0 to 2.0 (16 to 32) + Refer to dicamba dimethylamine salt label	Fall seeded that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Spring seeded wheat from the 3- to 5-leaf stage of growth.	This tank mix improves control of broadleaves such as prostrate knotweed and kochia. Apply to weeds up to the 8- leaf stage, 3 inches in height or 2 inches in diameter, whichever comes first. Apply to kochia up to 2 inches in height or diameter.
Double Up B + D + tribenuron-methyl plus thifensulfuron-methyl herbicide + Nonionic surfactant	1.0 to 2.0 (16 to 32) + Refer to tribenuron-methyl plus thifensulfuron-methyl labels + 1 to 2 qt/100 gal of water	Apply to Winter wheat that is well tillered (Feekes 3.0) through mid- jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the tribenuron-methyl plus thifensulfuron-methyl label for crop rotation and restrictions. Apply to Spring wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the tribenuron-methyl plus thifensulfuron-methyl label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, chickweed and redroot pigweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first.
Double Up B + D + triasulfuron herbicide + Nonionic surfactant	1.0 to 2.0 (16 to 32) + Refer to triasulfuron label + 1 to 2 qt/100 gal of water	Apply to wheat and barley that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the triasulfuron herbicide label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, tansy mustard and chickweed. Apply to weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Double Up B + D + tribenuron-methyl herbicide + Nonionic surfactant	1.0 to 2.0 (16 to 32) + Refer to tribenuron-methyl label + 1 to 2 qt/100 gal of water	Apply to wheat, barley and triticale that is well tillered (Feekes 3.0) through mid-jointing (second node visible, Feekes 7.0). Do not apply if the tip of the flag leaf is visible in the whorl. Follow the tribenuron-methyl herbicide label for crop rotation and restrictions.	This tank mix improves control of broadleaf weeds such as henbit, chickweed, redroot pigweed and suppression of Canada thistle. Apply to annual weeds up to the 8-leaf stage, 4 inches in height or across, whichever comes first and to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new growth.

	RATE		AND SPECIFIC DIRECTIONS
PRODUCT	pints/acre (ounce/acre)	CROP	WEEDS
Double Up B + D + clopyralid plus 2-ethylhexyl ester of MCPA herbicide	1.0 to 2.0 (16 to 32) + Refer to clopyralid plus 2-ethylhexyl ester of MCPA labels	Apply to wheat and barley that is well tillered (Feekes 3.0) but prior to the joint stage.	This tank mix improves control of kochia, wild buckwheat and suppression of Canada thistle. Apply to annual broadleaf weeds up to the 8- leaf stage, 4 inches in height or 2 inches in diameter and to Canada thistle in the rosette to prebud stage.
Double Up B + D + metribuzin herbicide	1.5 (24) + Refer to metribuzin label	Apply to Winter wheat in Idaho, Oregon and Washington that is well tillered (Feekes 3.0) but prior to the joint stage. Avoid application when crop has experienced winter kill, frost damage, disease or drought.	This tank mix improves control of broadleaf weeds such as chickweed, filigree, and henbit. Apply to weeds up to the 4-leaf stage, 2 inches in height or diameter, whichever comes first. A recognized authority should be consulted concerning the use of this mixture in your area.

FALLOWLAND

Fallowland is idle land, postharvest to crops or between crops.

PRODUCT	RATE pints/acre (ounce/acre)	APPLICATION TIMING AND SPECIFIC DIRECTIONS	
		TYPE OF WEED	DIRECTIONS
Double Up B + D	2.0 to 4.0 (32 to 64)	Annual broadleaf weeds	Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use the higher rate on older and drought-stressed plants. Use a higher rate in the rate range when weeds are larger and under less favorable growth conditions.
Double Up B + D	3.5 to 4.0 (56 to 64)	Biennial broadleaf weeds	Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed.

DIRECTIONS FOR FALLOWLAND: Use 2.0 to 4.0 pints of this product in a recommended minimum of 10 gallons of water per acre for ground application and recommended minimum of 2 gallons for aerial application of water per acre on annual broadleaf weeds and up to 4.0 pints per acre on established perennial species such as Canada thistle and field bindweed.

Use lower rate when annual weeds are small (2" to 3" tall) and growing actively. Use the higher rate on older and drought-stressed plants. Spray musk thistles and other biennial species while in seedling to rosette stage, and before flower stalks are initiated. The lower rate can be used in spring during rosette stage. In fall or after flower stalks have developed, use highest rate. Spray perennial weed in bud to bloom stage, or in good vegetative growth.

If environmental and/or plant conditions in fallow are hot, dry, and dusty this product should not be used.

RESTRICTION FOR USE ON FALLOWLAND:

- Do not make more than two applications per year.
- Do not exceed 4.0 pints of this product (1.0 lb/A bromoxynil)
- Do not exceed 2.0 lbs ae 2,4-D per acre per year.
- Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.
- Minimum of 30 days between applications.
- (PHI) Do not cut, forage or hay within 7 days of application.
- Do not disturb treated area for at least 2 weeks after treatment or until weed tops are dead.

CONSERVATION RESERVE PROGRAM (CRP) ACRES

	RATE pints/acre (ounce/acre)	APPLICATION TIMING AND SPECIFIC DIRECTIONS	
PRODUCT		CROP	WEEDS
Double Up B + D	1.0 to 2.0 (16 to 32)	Apply to grasses from the 6-leaf stage	Apply 1.0 pint per acre to MOST SUSCEPTIBLE and 1.5 to 2.0 pints per acre to SUSCEPTIBLE broadleaf weeds up to the 8-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.

DIRECTIONS FOR GRASSES IN CONSERVATION RESERVE PROGRAM AREAS: To control annual broadleaf weeds, apply when weeds are actively growing. Use 1.0 to 1.5 pint per acre when weeds are small; use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than 6 leaves or prior to grasses being well established. To control biennial and perennial broadleaf weeds in established grasses, apply at a rate of 1.5 to 2.0 pints per acre. Apply to actively growing weeds.

Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage.

NOTE: Suggest at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground.

RESTRICTION FOR USE ON CONSERVATION RESERVE PROGRAMS (CRP) ACRES:

- Do not allow livestock to graze in treated areas or feed treated grass to livestock.
- Do not apply if desirable legumes are included within the CRP area.
- Do not apply more than 2.0 pints product (0.5 lb. ae Bromoxynil) per acre per year.
- Do not exceed 2.0 lbs ae 2,4-D per acre per season.
- Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.
- Do not harvest or graze treated Conservation Reserve Program acres.
- Do not apply to grasses in the boot to dough stage if grass seed production is desired.

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: Pesticide wastes are toxic. Improper disposal of excess pesticides, spray mixture, or rinsate is a violation of federal Law. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for Guidance.

CONTAINER HANDLING: [Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] "NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type/size."

[Note to Reviewer: bracketed section headers will be included when multiple container types/sizes are listed on the label.]

Non-Refillable (<5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke."

Non-Refillable (>5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Then offer for recycling if available or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke."

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable Container: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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 must 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 Agri-Enterprises, LLC (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 Agri-Enterprises, LLC'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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