



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
66222-119

Date of Issuance:  
APR 17 2006

NOTICE OF PESTICIDE:  
  x   Registration  
       Reregistration

(under FIFRA, as amended)

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Bromoxynil 2EC  
Herbicide

Name and Address of Registrant (include ZIP Code):

Ms. Jane Rothwell  
Makhteshim Agan of North America, Inc.  
4515 Falls of Neuse Road, Suite 300  
Raleigh, NC 27609

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following changes to your labeling:
  - a. Change the registration number to "66622-119"
  - b. Make all of the changes detailed in the document "Summary of Comments on Bromoxynil 2 EC"
3. Submit final labeling for this product **within 30 days** of the date of this letter

Signature of Approving Official:

Date:

4-17-06

4. Submit a study for storage stability (Guideline 830.6317) and corrosion characteristics (Guideline 830.6320) no later than April 4, 2007.

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, (W.D. WA). For further information, please refer to [www.epa.gov/espp/wtc/index.html](http://www.epa.gov/espp/wtc/index.html).

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.

A stamped copy of the label is enclosed for your records.

If you have any questions about this letter, please contact Tobi Colvin-Snyder at 703-305-7801.



Jim Tompkins  
Product Manager (25)  
Herbicide Branch  
Registration Division (7505C)

# Summary of Comments on BROMOXYNIL

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## Page: 1

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Sequence number: 1

Author: Tobi

Date: 4/5/06 2:26:50 PM

Type: Note

Add the following note to physician:

Note to physician: May pose an aspiration hazard. Contains petroleum distillate.

## Page: 2

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Sequence number: 1

Author: Tobi

Date: 4/5/06 2:27:51 PM

Type: Note

Move "Harmful if swallowed." to immediately following "Causes substantial but temporary eye injury."

Sequence number: 2

Author: Tobi

Date: 4/17/06 1:53:56 PM

Type: Note

Delete "Coveralls over".

After "Protective eyewear" add "(goggles, face shield, or safety glasses).

Delete "Chemical resistant headgear for overhead exposure."

Change "Chemical resistant footwear" to "Shoes"

## Page: 33

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Sequence number: 1

Author: Tobi

Date: 4/5/06 2:34:09 PM

Type: Note

Add "To the extent permitted by law," immediately prior to

4/37

# BROMOXYNIL 2EC

## HERBICIDE

FOR CONTROL OF CERTAIN BROADLEAF WEEDS CORN (FIELD AND POP), SORGHUM (GRAIN AND FORAGE), SMALL GRAINS, SEEDLING ALFALFA, FLAX, GARLIC, ONIONS, MINT, GRASSES GROWN FOR SEED AND SOD PRODUCTION, CONSERVATION RESERVE PROGRAM (CRP) AREAS, NON-RESIDENTIAL TRUFGRASS, AND NON-CROPLAND/INDUSTRIAL SITES.

<b>ACTIVE INGREDIENT:</b>	<b>% BY WT.</b>
Octanoic acid ester of bromoxynil* (3,5-dibromo-4-hydroxybenzotrile).....	33.4%
<b>INERT INGREDIENTS:</b> .....	<u>66.6%</u>
	<b>TOTAL 100.0%</b>

Contains xylene range/petroleum distillates.

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

### KEEP OUT OF REACH OF CHILDREN

### AVISO-WARNING

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.)

#### 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 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 doctor for treatment advice.
- IF INHALED:**
  - Move 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.

NET CONTENTS: 2 1/2 GALS.

**ACCEPTED**  
with **COMMENTS**  
in EPA Letter Dated

APR 17 2006

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

66222-119

EPA Reg. No. 66222-xx  
EPA Est. No.

Makhteshim Agan of North America Inc.  
4515 Falls of Neuse Rd., Suite 300  
Raleigh, NC 27609

5/37

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING**



Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Harmful if swallowed.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistant category selection chart.

**Applicators and other handlers must wear:**



- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate or Viton gloves
- Chemical resistant apron when cleaning equipment
- Protective eyewear
- Chemical resistant headgear for overhead exposure
- Chemical resistant footwear plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.

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 use 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 APPLICATION, 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.)

**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.
- 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 and fish. Use with care when applying to areas frequented by wildlife or adjacent to any body of water. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment washwaters.

**PHYSICAL AND CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

6/37

### 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.

This Supplemental Label must be in possession of the user at the time of pesticide application.

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) of 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 long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber or Viton gloves
- Chemical resistant footwear plus socks
- Chemical resistant headgear for overhead exposure
- Protective eyewear

### GENERAL INFORMATION

Bromoxynil herbicide is formulated as an emulsifiable concentrate of octanoic acid ester of bromoxynil containing the equivalent of 2 lbs. per gallon.

Bromoxynil herbicide is a selective postemergence herbicide for control of important broadleaf weeds infesting corn (field and pop), sorghum (grain and forage), small grains (wheat, barley, oats, rye, triticale), alfalfa (seedling), flax, onions, garlic, mint (established peppermint and spearmint), Conservation Reserve Program (CRP) areas, grass grown for seed or sod production, non-residential turfgrass, and non-cropland and industrial sites. Optimum weed control is obtained when Bromoxynil herbicide is applied to actively growing weed seedlings.

Bromoxynil herbicide is primarily a contact herbicide, therefore thorough coverage of the weed seedlings is essential for optimum control.

Bromoxynil herbicide 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. Because the activity of Bromoxynil herbicide is not systemic, 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.

### MIXING, LOADING, AND HANDLING INSTRUCTIONS

#### 2.5 Gallon containers

It is strongly recommended that special care be taken in mixing and loading this product. Hands should be placed on the container in such a way as to avoid possible drip or splash.

#### 30 Gallon and Bulk containers

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 use 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.

**BROMOXYNIL HERBICIDE ALONE:** Fill the spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water. Begin agitation and add the recommended amount of Bromoxynil herbicide. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

**TANK MIXTURES:** Bromoxynil herbicide can be applied in tank mixture with other herbicides and insecticides registered for use on approved crops. Refer to the specific crop section for rate recommendations and other restrictions. To apply Bromoxynil herbicide in mixture with another product, fill the spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with clean water and begin agitation. If tank mixing with wettable powder, soluble powder, flowable or dry flowable products, add the powder or flowable product first. After the other herbicide is thoroughly mixed with water add the recommended amount of Bromoxynil herbicide and add water to the spray tank to the desired level. If tank mixing with other product types, add the Bromoxynil herbicide first before adding the other product. Always mix one product in water thoroughly before adding another product or compatibility problems may occur. Never mix two products together without first mixing in water.

Maintain sufficient agitation while mixing and during application to ensure a uniform spray mixture. If spray mixture is allowed to remain without agitation for short periods of time, be sure to agitate until uniformly mixed before application.

#### COMPATIBILITY OF INSECTICIDES WITH BROMOXYNIL HERBICIDE

The following foliar insecticides are compatible with Bromoxynil herbicide as tank mixtures:

INSECTICIDE COMMON NAME	TRADE NAME	FORMULATION
Diazinon	Various	Emulsifiable concentrate
Dimethoate	Various	Emulsifiable Concentrate
Trichlorfon	Dylox <sup>®</sup>	Soluble Powder
Carbofuran	Furadan <sup>®</sup>	Flowable
Chlorpyrifos	Lorsban <sup>®</sup>	Emulsifiable Concentrate
Mslsyhion	Various	Emulsifiable Concentrate
Oxydemeton-methyl	Metasystox-R <sup>®</sup>	Sprayable concentrate
Permethrin	Pounce <sup>®</sup>	Emulsifiable concentrate
Fenvalerate	Pydrin <sup>®</sup>	Emulsifiable concentrate
Carbaryl	Sevin <sup>®</sup>	Sprayable wettable powder or Flowable
Demeton	Systox <sup>®</sup>	Emulsifiable concentrate

If tank mixing with products other than those listed within each crop section, 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 with Bromoxynil herbicide.

#### SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

Bromoxynil herbicide 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 Bromoxynil herbicide. 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 Bromoxynil herbicide is evenly mixed with the fertilizer. Leaf burn may occur when Bromoxynil herbicide is applied with liquid fertilizer, but new leaves are not adversely affected.

**CAUTION:** Fertilizers and spray additives can increase foliage leaf burn when applied with Bromoxynil herbicide. Do not apply fertilizers or spray additives with Bromoxynil herbicide if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to Bromoxynil herbicide. Do not apply Bromoxynil herbicide in combination with fertilizers or spray additives if restricted under the individual crop use directions.

#### APPLICATION PROCEDURES

Bromoxynil herbicide can be applied to registered use areas by ground, aerial and sprinkler irrigation equipment. The following provides recommended methods of application for each crop.

CROP	TYPE OF APPLICATION EQUIPMENT		
	GROUND	AERIAL	SPRINKLER IRRIGATION
Corn (field and pop)	X	X	X
Sorghum (grain and forage) and Sudangrass	X	X	X
Small grains	X	X	X
Alfalfa (seedling)	X	X	X
Flax	X	X	-
Garlic	X	X	X
Mint	X	-	X
Onions	X	-	X
Grass grown for seed or sod production	X	X	X
Conservation Reserve Program (CRP) areas	X	X	X
Non-residential turfgrass	X	X	-
Non-cropland/Industrial sites	X	X	-

**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 Bromoxynil herbicide 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 corn or grain sorghum is 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.

**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.

**SPRINKLER IRRIGATION APPLICATION**

Bromoxynil herbicide can be applied through sprinkler irrigation systems to small grains, field corn, popcorn, and grain sorghum, mint, grasses grown for seed or sod production, garlic, onions, and seedling alfalfa.

Apply Bromoxynil herbicide 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 the Bromoxynil herbicide.
9. Bromoxynil herbicide should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of Bromoxynil herbicide should be made during the last 30-45 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 Bromoxynil herbicide is diluted in the supply tank fill the tank with half of the water amount desired, add the Bromoxynil herbicide and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part Bromoxynil herbicide.
13. Start the sprinklers and then inject Bromoxynil herbicide into the irrigation line. Bromoxynil herbicide 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 the Bromoxynil herbicide label for detailed information on application rates and timings.

#### CHEMIGATION USER PRECAUTIONS

Application of more than 0.5 inch/acre of irrigation water may result in decreased product performance on certain soils.

Do not apply when conditions favor drift, when system connections or fittings leak, or when nozzles do not provide uniform distribution.

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.

Do not connect an irrigation system used for pesticide application to a public water system.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

#### CULTIVATION

When properly utilized, timely cultivations of row crops may aid overall weed control efforts as well as crop growth. However, cultivation BEFORE or DURING Bromoxynil herbicide applications may place target weeds under stress, resulting in erratic weed control. Whenever Bromoxynil herbicide is being utilized in an overall weed control program, plan to postpone any anticipated cultivations until 5-7 days after application to ensure best performance.

#### GENERAL WEED LIST

Postemergence application of Bromoxynil herbicide will control the following weeds when sprayed in the seedling stage. Maximum weed stage of growth is listed under RECOMMENDED USES for each crop.

MOST SUSCEPTIBLE BROADLEAF WEED SPECIES		SUSCEPTIBLE BROADLEAF WEED SPECIES	
Annual sowthistle	( <i>Sonchus oleraceus</i> )	Buffalobur	( <i>Solanum rostratum</i> )
Black nightshade	( <i>Solanum nigrum</i> )	Burcumber	( <i>Sicyos angulatus</i> )
Blue mustard	( <i>Chorispora tenella</i> )	Common groundsel	( <i>Senecio vulgaris</i> )
Bristly starbur	( <i>Acanthospermum hispidum</i> )	Common ragweed	( <i>Ambrosia artemisiifolia</i> )
Coast fiddleneck	( <i>Amsinckia intermedia</i> )	Corn chamomile	( <i>Anthemis arvensis</i> )
Common cocklebur	( <i>Xanthium strumarium</i> )	Corn gromwell	( <i>Lithospermum arvense</i> )
Common lambsquarters	( <i>Chenopodium album</i> )	Cow cockle	( <i>Saponaria vaccaria</i> )

10/31

Common tarweed	( <i>Hemizonia congesta</i> )	Giant ragweed	( <i>Ambrosia trifida</i> )
Cutleaf nightshade	( <i>Solanum triflorum</i> )	Hemp sesbania	( <i>Sesbania exaltata</i> )
Eastern black nightshade	( <i>Solanum ptycanthum</i> )	Ivyleaf morningglory	( <i>Ipomoea hederacea</i> )
Field pennycress	( <i>Thlaspi arvense</i> )	Knawel	( <i>Scleranthus annuus</i> )
Green smartweed	( <i>Polygonum scabrum</i> )	<sup>2</sup> Kochia	( <i>Kochia scoparia</i> )
Hairy nightshade	( <i>Solanum sarachoides</i> )	London rocket	( <i>Sisymbrium irio</i> )
Jimsonweed	( <i>Datura stramonium</i> )	Mayweed	( <i>Anthemis cotula</i> )
Ladysthumb	( <i>Polygonum persicaria</i> )	Pitted morningglory*	( <i>Ipomoea lacunosa</i> )
Lanceleaf sage*	( <i>Salvia reflexa</i> )	Prostrate knotweed	( <i>Polygonum aviculare</i> )
Pennsylvania smartweed	( <i>Polygonum pennsylvanicum</i> )	Puncturevine	( <i>Tribulus terrestris</i> )
Pepperweed spp.	(annual) ( <i>Lepidium spp.</i> )	<sup>2</sup> Redroot pigweed	( <i>Amaranthus retroflexus</i> )
Shepherdspurse	( <i>Capsella bursa-pastoris</i> )	Russian thistle	( <i>Salsola kali</i> )
Silverleaf nightshade	( <i>Solanum elaeagnifolium</i> )	<sup>2</sup> Spiny pigweed	( <i>Amaranthus spinosus</i> )
Sunflower	( <i>Helianthus annuus</i> )	Tall morningglory	( <i>Ipomoea purpurea</i> )
Tartary buckwheat	( <i>Fagopyrum tataricum</i> )	<sup>2</sup> Tall waterhemp	( <i>Amaranthus tuberculatus</i> )
Wild buckwheat	( <i>Polygonum convolvulus</i> )	Tumble mustard	( <i>Sisymbrium altissimum</i> )
		Velvetleaf	( <i>Abutilon theophrasti</i> )
*For control of sunflower, delay application until first emerging sunflower seedlings are 4 inches in height.		Venice mallow	( <i>Hibiscus trionum</i> )
		Wild mustard	( <i>Sinapis arvensis</i> )
		Wild radish	( <i>Raphanus raphanistrum</i> )
		Yellow starthistle	( <i>Centaurea solstitialis</i> )
<sup>2</sup> For effective control, these weeds should not exceed the 4 leaf stage or 2 inches in height, whichever comes first.			

\*Not registered for use in California

**WEED SUPPRESSION**

Bromoxynil + Atrazine Herbicide suppresses the growth of Canada thistle (*Cirsium arvense*) by burning down top growth. Regrowth may occur.

**CALIFORNIA REGISTRATIONS**

Only the following recommendations referenced in this label are registered for use in California: seedling alfalfa, small grains (wheat, barley, oats, rye and triticale), flax, corn (post emergence application only), sorghum (post emergence application only), mint onions garlic; chemigation in seedling alfalfa, small grains, onions and garlic; 24-D and MCPA tank mixtures in small grains; 2,4-D and atrazine tank mixtures in corn and sorghum; 2,4-DB and Pursuit tank mixtures in seedling alfalfa; grass for seed and sod production, non-residential turfgrass; and non-cropland and industrial sites. All applications must be made with a minimum spray volume of 10 GPA by ground or 5 GPA by air equipment.

**SPECIFIC CROP RECOMMENDATIONS**

**Cereal Grain Crops:**

Corn (Field and Pop), Sorghum (Grain and Forage), and Sudangrass  
 Small Grains (Wheat, Barley, Oats, Rye and Triticale)

**Forage, Fiber and Specialty Crops**

Alfalfa (Seedling)  
 Flax  
 Garlic  
 Mint (Established Peppermint and Spearmint)  
 Onions

**Grass Crops**

Conservation Reserve Program (CRP) Areas  
 Grass Grown for Seed or Sod Production  
 Non-Residential Turfgrass

**Non-Cropland**

Non-cropland and Industrial Sites

**CEREAL GRAIN CROPS**

**CORN (FIELD AND POP), SORGHUM (GRAIN AND FORAGE), AND SUDANGRASS**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

PRODUCT	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
		CROP	WEEDS
Bromoxynil herbicide	Preemergence 1 – 1½ pints/A	Apply to corn or sorghum before planting until just prior to crop emergence.	See CORN AND SORGHUM APPLICATION RATE TABLE- Bromoxynil herbicide for list of weeds and corresponding stages of growth that are controlled by Bromoxynil herbicide at recommended rates of application. For control of additional weeds not listed in the rate table see the GENERAL WEED LIST.
	1 pint/A	Apply to corn after emergence but prior to tassel emergence.  Apply to sorghum and sudangrass between the 3-leaf stage but prior to the preboot stage (growth stage 4).	
	1½ pints/A	Apply to corn between the 4-leaf stage and prior to tassel emergence.  Apply to sorghum and sudangrass between the 4-leaf stage but prior to preboot stage (growth stage 4).	
	2 pints/A	Apply to field corn only between the 4-leaf stage but prior to tassel emergence. <b>WARNING: DO NOT APPLY THE 2 PINTS/A RATE OF BROMOXYNIL ALONE OR IN TANK-MIXTURES TO SORGHUM</b>	Use the 2 pints/A rate on corn to control susceptible weeds that are growing under less than optimum conditions and where Bromoxynil + Atrazine herbicide tank mixtures cannot be used.
	Chemigation 2 pints/A Only	Apply to corn after emergence but prior to tassel emergence.  Apply to sorghum and sudangrass after emergence but prior to preboot stage (growth stage 4).  Apply through automated sprinkler irrigation systems with mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTRUCTIONS section for complete details	Apply to MOST SUSCEPTIBLE broadleaf weeds up to the 8-leaf stage or 4 inches in height or 2 inches in diameter, whichever comes first. Apply to SUSCEPTIBLE broadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first. Do not use chemigation for control of weeds that exceed 4 inches in height because control may be unacceptable.

**CORN AND SORGHUM APPLICATION RATE TABLE**

WEED SPECIES <sup>1</sup>		BROMOXYNIL + ATRAZINE HERBICIDE RATE			
When determining leaf stage, count all leaves except cotyledonary leaves.		1 Pint/A		1½ - 2 Pints/A <sup>4</sup>	
		MAXIMUM LEAF STAGE (INCHES)	MAXIMUM WEED HEIGHT (INCHES)	MAXIMUM LEAF STAGE (INCHES)	MAXIMUM WEED HEIGHT (INCHES)
Black nightshade	( <i>Solanum nigrum</i> )	6	6	6	6
Buffalobur	( <i>Solanum rostratum</i> )	4	2	6	4
Burcucumber	( <i>Sicyos angulatus</i> )	-	-	4	4
Common cocklebur	( <i>Xanthium Strumarium</i> )	6	8	8	10
Common lambsquarters	( <i>Chenopodium album</i> )	-	6	-	8
Common ragweed	( <i>Ambrosia artimisiifolia</i> )	6	4	8	8

12/37

Eastern black nightshade	( <i>Solanum ptycanthum</i> )	6	6	6	6
Giant ragweed	( <i>Ambrosia trifida</i> )	6	4	6	6
Hemp sesbania	( <i>Sesbania exaltata</i> )	-	-	4	4
Ivyleaf morningglory	( <i>Ipomoea hederacea</i> )	3	3	4	4
Jimsonweed	( <i>Datura stramonium</i> )	4	4	6	6
Kochia	( <i>Kochia scoparia</i> )	-	-	-	2
Ladysthumb	( <i>Polygonum persicaria</i> )	4	4	6	6
Pennsylvania smartweed	( <i>Polygonum pennsylvanicum</i> )	4	4	6	6
Pitted morningglory	( <i>Ipomoea lacunosa</i> )	3	3	4	4
Redroot pigweed <sup>3</sup>	( <i>Amaranthus retroflexus</i> )	-	-	4	2
Spiny pigweed <sup>3</sup>	( <i>Amaranthus spinosus</i> )	-	-	4	2
Sunflower	( <i>Helianthus annuus</i> )	4	6	6	8
Tall morningglory	( <i>Ipomoea purpurea</i> )	3	3	4	2
Tall waterhemp <sup>3</sup>	( <i>Amaranthus tuberculatus</i> )	-	-	4	2
Velvetleaf	( <i>Abutilon theophrasti</i> )	4	3	6	5
Venice mallow	( <i>Hibiscus trionum</i> )	-	-	6	5
Wild buckwheat	( <i>Polygonum convolvulus</i> )	4	6	4	2
Wild mustard	( <i>Sinapis arvensis</i> )	-	-	4	4
<b>WEEDS SUPPRESSED<sup>2</sup></b>					
Canada thistle	( <i>Cirsium arvense</i> )	Not Recommended		8 inch to bud stage	

1. When determining leaf stage, count all leaves except cotyledonary leaves.
  2. Bromoxynil herbicide suppresses the growth by burning down of top growth. Regrowth may occur.
  3. Control of pigweeds in the high plains areas of Texas and Oklahoma may not be satisfactory with Bromoxynil herbicide. Repeat applications may be necessary to achieve satisfactory control.
  4. Do not apply Bromoxynil herbicide at the 2 pints/A rate to sorghum
- \* Not registered for use in California

**BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

PRODUCT	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
		CROP	WEEDS
Bromoxynil herbicide + Atrazine	Preemergence ¾ - 1½ pints/A + ½ - 1 1/5 lb. ai/A	Apply to corn or sorghum before planting until just prior to crop emergence.	See CORN AND SORGHUM APPLICATION RATE TABLE-BROMOXYNIL + ATRAZINE TANK MIXTURES for list of weeds and corresponding stages of growth that are controlled by Bromoxynil + Atrazine tank mixtures at recommended rates of application. For control of additional weeds not listed in the rate table see the GENERAL WEED list.
Bromoxynil herbicide + Atrazine	¾ - 1½ pints/A + ½ - 1 1/5 lb. ai/A	Apply to corn after emergence but before corn is 12 inches tall.  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.	See CORN AND SORGHUM APPLICATION RATE TABLE-BROMOXYNIL + ATRAZINE TANK MIXTURES for list of weeds and corresponding stages of growth that are controlled by Bromoxynil + Atrazine tank mixtures at recommended rates of

	$1\frac{1}{2}$ pints/A + $\frac{1}{2}$ - $1\frac{1}{5}$ lb. ai/A	Apply to corn between the 4-leaf stage and before corn is 12 inches tall.  Apply to sorghum between the 4-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first.	application. For control of additional weeds not listed in the rate table see the GENERAL WEED list.
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**ATRAZINE TANK MIX RESTRICTIONS**

Atrazine is a Restricted Use Herbicide due to ground water 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 ground water.

**CORN AND SORGHUM APPLICATION RATE TABLE-BROMOXYNIL + ATRAZINE TANK MIXTURES**

WEED SPECIES <sup>1</sup>		BROMOXYNIL AND ATRAZINE RATE (TANK MIX)											
When determining leaf stage, count all leaves except cotyledonary leaves		$\frac{1}{4}$ pint/A + $\frac{1}{2}$ lb ai/A		$\frac{1}{4}$ pint/A + 1 1/5 lb ai/A		1 pint/A + $\frac{1}{2}$ lb ai/A		1 pint/A + 1 1/15 lb ai/A		$1\frac{1}{2}$ pintsA + $\frac{1}{2}$ lb ai/A		$1\frac{1}{2}$ pints/A + 1 1/5 lb ai/A	
		Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height
		Black Nights hade	<i>Solanum nigrum</i>	4	4	4	4	6	6	6	6	6	6
Buffalo bur	<i>Solanum rostratum</i>	4	4	4	4	6	4	6	4	6	4	6	4
Burcuc umber	<i>Sicyos angulatus</i>	4	4	4	4	4	4	6	6	6	6	6	6
Common cockle bur	<i>Xanthium strumarium</i>	6	8	8	10	8	10	10	12	10	12	10	12
Common Lambs quarters	<i>Chenopodium album</i>	-	6	-	10	-	10	-	12	-	12	-	12
Common Ragweed	<i>Ambrosia artemisiifolia</i>	6	4	8	6	8	6	8	6	8	6	8	6
Eastern Black Nightshade	<i>Solanum Ptycanthum</i>	4	4	4	4	6	6	6	6	6	6	6	6
Entire-leaf Morning-glory	<i>Ipomoea hederacea</i>	-	-	4	3	4	3	4	3	4	3	4	3
Giant Ragweed	<i>Ambrosia trifida</i>	4	6	6	8	6	8	6	8	8	10	8	10
WEED SPECIES <sup>1</sup>		BROMOXYNIL AND ATRAZINE RATE (TANK MIX)											
When determining leaf stage, count all leaves except cotyledonary leaves		$\frac{1}{4}$ pint/A + $\frac{1}{2}$ lb ai/A		$\frac{1}{4}$ pint/A + 1 1/5 lb ai/A		1 pint/A + $\frac{1}{2}$ lb ai/A		1 pint/A + 1 1/15 lb ai/A		$1\frac{1}{2}$ pintsA + $\frac{1}{2}$ lb ai/A		$1\frac{1}{2}$ pints/A + 1 1/5 lb ai/A	
		Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height
		Hemp Sesbania	<i>Sesbania exaltata</i>	4	4	4	4	4	4	4	4	4	4
Ivyleaf Morning-glory	<i>Ipomoea hederacea</i>	3	3	4	4	4	4	4	4	4	4	4	4
Jimson	<i>Datura</i>	4	4	4	4	6	6	6	6	6	6	6	6

weed	stramonium												
Kochia	<i>Kochia scoparia</i>	-	2	-	2	-	2	-	2	-	4	-	4
Ladys-thumb	<i>Polygonum persicaria</i>	4	4	4	4	6	6	8	8	8	8	8	8
Marestail*	<i>Conyza canadensis</i>	-	-	-	3	-	5	-	5	-	5	-	5
Palm-leaf Morning-glory	<i>Ipomoea wrightii</i>	-	-	4	3	4	3	4	3	4	3	4	3
Pennsylvania Smart weed	<i>Polygonum strumarium</i>	4	4	4	4	6	6	8	8	8	8	8	8
Pitted Morning-glory*	<i>Ipomoea lacunosa</i>	3	3	4	4	4	4	4	4	4	4	4	4
Poke-weed*	<i>Phytolacca americana</i>	-	-	4	4	6	6	6	6	6	6	6	6
Prickly Sida	<i>Sida spinosus</i>	-	-	6	2	4	1	6	2	4	1	6	2
Puncture-vine	<i>Tribulus terrestris</i>	-	-	-	-	-	-	6	4	6	4	6	4
Purple Mornnglory	<i>Ipomoea muricata</i>	-	-	2	3	2	3	2	3	2	3	2	3
Red-root Pig-weed <sup>3</sup>	<i>Amaranthus retroflexus</i>	4	2	8	6	6	4	8	6	6	4	8	6
Small-flower Morning-glory	<i>Jaquemontia tamnifolia</i>	-	-	4	3	4	3	4	3	4	3	4	3
Smooth Pig-weed <sup>3</sup>	<i>Amaranthus hybridus</i>	4	2	6	4	4	2	6	4	6	4	6	4
Spiny Pig-weed <sup>3</sup>	<i>Amaranthus spinosus</i>	4	2	8	6	6	4	8	6	6	4	8	6
Sunflower	<i>Helianthus annuus</i>	6	8	8	10	8	10	10	12	10	12	10	12

(Continued)

WEED SPECIES <sup>1</sup>		BROMOXYNIL AND ATRAZINE RATE (TANK MIX)											
		¼ pint/A + ½ lb ai/A		¼ pint/A + 1 1/5 lb ai/A		1 pint/A + ½ lb ai/A		1 pint/A + 1 1/5 lb ai/A		1½ pints/A + ½ lb ai/A		1½ pints/A + 1 1/5 lb ai/A	
		Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height	Max leaf stage	Max weed height
Tall Morning-glory	<i>Ipomoea purpurea</i>	3	3	4	4	4	4	4	4	4	4	4	4
Tall Water-hemp <sup>3</sup>	<i>Amaranthus tuberculatus</i>	4	2	8	6	6	4	8	6	6	4	8	6
Tooth-	<i>Euphor-</i>	2	2	2	2	4	4	4	4	4	4	4	4

15/37

ed Spurge	<i>bia dentata</i>												
Velvet-leaf	<i>Abutilon Theophrasti</i>	4	3	4	3	6	5	6	5	8	6	8	6
Venice Mallow	<i>Hibiscus trionum</i>	4	2	4	2	4	2	4	2	4	2	4	2
Wild Buck-wheat	<i>Polygonum convolvulus</i>	6	8	8	10	8	10	10	12	10	12	10	12
Wild Must-ard	<i>Sinapis arvensis</i>	4	4	4	4	4	4	4	4	4	4	4	4
<b>WEEDS SUPPRESSED<sup>2</sup></b>													
Can-ada thistle	<i>Cirsium arvense</i>	Not Recommended		Not Recommended		8"-bud		8"-bud		8"-bud		8"-bud	

<sup>1</sup> When determining leaf stage, count all leaves except cotyledonary leaves  
<sup>2</sup> Selected rates of Bromoxynil + Atrazine tank mixtures suppress the growth by burning down of top growth. Regrowth may occur.  
<sup>3</sup> If pigweeds (*Amaranthus sp.*) present in the field to be treated have been identified as triazine resistant biotypes, use Bromoxynil herbicide at 1½ pints/A in a tank mixture with atrazine at ½ or 1 1/5 lb ai/A. Applications should be made when pigweeds do not exceed the 4-leaf stage and 2 inches in height. Control of pigweeds in the high plains areas of Texas and Oklahoma may not be satisfactory with Bromoxynil + Atrazine tank mixtures. Repeat applications may be necessary to achieve satisfactory control.  
 \*Not registered for use in California.

**ATRAZINE CONVERSION TABLE<sup>1/</sup>**

ATRAZINE FORMULATION	ATRAZINE RATE POUNDS OF ACTIVE INGREDIENT PER ACRE	ATRAZINE FORMULATION RATE PER ACRE
Atrazine 4L	½ 1 1/5	1 pint 2 2/5 pints
Atrazine 80WP	½ 1 1/5	¾ pound 1½ pounds
Aatrex® Nine-O	½ 1 1/5	3/5 pound 1½ pounds

<sup>1/</sup> Follow all precautions and limitations on the labels of products used in tank mixture with Bromoxynil herbicide.

**SPECIAL USE DIRECTIONS FOR OTHER WEED PROBLEMS IN CORN AND SORGHUM**

**Large Common cocklebur, Common Lambsquarters and Sunflower**

For control of common cocklebur and common lambsquarters up to 14 inches in height and sunflower up to 18 inches in height, use a postemergence application of Bromoxynil herbicide at 1 pint/A. Make a second application of Bromoxynil herbicide at the same rate 7 to 10 days later.

**Large Velvetleaf**

For control of velvetleaf up to 14 inches in height, use postemergence application of Bromoxynil herbicide at 1½ - 2 pints/A or Bromoxynil + Atrazine tank mixture at 1 pint/A + 1 1/5 lb ai/A. Make a second application of Bromoxynil herbicide at 1 pint/A 7 to 10 days later, but do not exceed a total of 2 pints/A of Bromoxynil herbicide per season on corn (field and pop).

**Canada Thistle Management**

For effective management of Canada thistle, the following Bromoxynil herbicide treatments should be applied to thistle from 8 inch to the bud stage for in-season burndown of top growth:

- Bromoxynil herbicide at 1½ - 2 pints/A
- Bromoxynil herbicide at 1 - 1½ pints/A + atrazine at ½ - 1 1/5 lbs ai/A
- Bromoxynil herbicide at 1 - 1½ pints/A + Banvel or Clarity at ¼ - ½ pint/A
- Bromoxynil herbicide at 1 - 1½ pints/A + atrazine at ½ - 1 1/5 lbs ai/A + Banvel or Clarity at 1/8 - ¼ pint/A
- Bromoxynil herbicide at 1 - 1½ pints/A + 2,4-D at 1/8 - ¼ lb ai/A
- Bromoxynil herbicide at 1 - 1½ pints/A + atrazine at ½ - 1 1/5 lbs ai/A + 2,4-D at 1/8 - ¼ lb ai/A

16/37

If possible follow with cultivation 14-21 days after treatment. In the fall apply 2,4-D (such as Weedone 638), Banvel, Clarity, or Roundup at recommended rates to Canada thistle 4-8 inches tall prior to killing frost. Follow with a similar control program in next years rotational crop.

**ADDITIONAL BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

PRODUCT	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
		CROP	WEEDS
Bromoxynil herbicide + Banvel® <sup>1</sup>	1 pint/A + 1/8 - 1/2 pint/A	Apply to field corn after emergence but before corn is 36 inches tall or 15 days before tassel emergence, whichever comes first. 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. Do not apply in the boot stage. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Bromoxynil herbicide at recommended rates of application plus improved control of pigweed. For Canada thistle burndown and field bindweed suppression up to the mid-bloom stage, use 1/4 - 1/2 pint/A of Banvel with Bromoxynil herbicide.
	1 1/2 pints/A + 1/8 - 1/2 pint/A	Apply to field corn between the 4-leaf stage but before corn is 36 inches tall or 15 days before tassel emergence, whichever comes first. 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. Do not apply in the boot stage. Use drop nozzles if crop is taller than 8 inches.	
Bromoxynil 2EC + atrazine + Banvel® <sup>1</sup>	1 pint/A + 1/2 - 1 1/5 lb. ai/A + 1/8 - 1/4 pint/A	Apply to field corn after emergence but before corn is 12 inches tall. 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. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Bromoxynil 2EC + atrazine tank mixtures at recommended rates of application plus improved control of pigweed. For field bindweed suppression, use 1/4 pint/A of Banvel/Clarity with Bromoxynil 2EC.

**ADDITIONAL BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

(Continued)

PRODUCT	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
		CROP	WEEDS
Bromoxynil 2EC + atrazine + Banvel® <sup>1</sup>	1 1/2 pints/A + 1/2 - 1 1/5 lb. ai/A + 1/8 - 1/4 pint/A	Apply to field corn between the 4-leaf stage and before corn is 12 inches tall. Apply to sorghum between the 4-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first. Do not apply in the boot stage. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Bromoxynil 2EC + atrazine tank mixtures at recommended rates of application plus improved control of pigweed. For field bindweed suppression, use 1/4 pint/A of Banvel/Clarity with Bromoxynil 2EC.

<sup>1</sup> Clarity may be used at the same rates as Banvel in a tank mixture on corn. These mixtures must be applied before corn exceeds 8 inches in height. Do not use Clarity in a tank mixture with Bromoxynil herbicide or Bromoxynil + Atrazine on sorghum.

**APPLICATION TIMING AND SPECIFIC COMMENTS**



PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide + 2,4-D (such as Weedone® and Weedar® brand herbicide)	1 pint/A + 1/16 - ¼ lb ai/A	Apply to field corn after emergence but prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches. 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. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Bromoxynil herbicide at recommended rates plus improved pigweed and kochia control. For Canada thistle burndown and field bindweed suppression up to the mid-bloom stage, use 1/8 - ¼ lb ai/A of 2,4-D with Bromoxynil herbicide.
	1½ pints/A + 1/16 - ¼ lb ai/A	Apply to field corn between the 4-leaf stage but prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches. 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.	
Bromoxynil herbicide + Atrazine + 2,4-D (such as Weedone and Weedar brand herbicide)	1 pint/A + ½ - 1 1/5 lb ai/A + 1/16 - 14 lb ai/A	Apply to field corn after emergence but before the corn is 12 inches tall. Use drop nozzles if crop is taller than 8 inches. 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. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by Bromoxynil + Atrazine tank mixtures at recommended rates of application plus improved devils claw control. For Canada thistle burndown and field bindweed suppression, use 1.8 - 1/4 lb ai/A of 2,4-D with Bromoxynil herbicide

**ADDITIONAL BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

PRODUCT	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
		CROP	WEEDS
Bromoxynil herbicide + Atrazine + 2,4-D (such as Weedone and Weedar brand herbicide)	1½ pints/A + ½ - 1 1/5 lb ai/A + 1/16 - 14 lb ai/A	Apply to field corn between the 4-leaf stage but before the corn is 12 inches tall. Use drop nozzles if crop is taller than 8 inches. Apply to sorghum between the 4-leaf stage 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 inches.	All weeds controlled by Bromoxynil + Atrazine tank mixtures at recommended rates of application plus improved devils claw control. For Canada thistle burndown and field bindweed suppression, use 1/8 - 1/4 lb ai/A of 2,4-D with Bromoxynil herbicide
Bromoxynil herbicide + Accent® + Non-ionic surfactant	1 pint/A + 2/3 oz/A + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn preemergence or postemergence up to 36 inches tall. Use drop nozzles when corn is 24 to 36 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by Bromoxynil herbicide at 1 or 1½ pints/A plus grasses and broadleaves controlled by Accent. For optimum weed control, treat when

	1½ pints/A + 2/3 oz/A + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn between the 4-leaf stage up to 36 inches in height. Use drop nozzles when corn is 24 to 36 inches tall. Do not apply this tank mix to sorghum.	broadleaves and grasses are in the recommended growth stage or size. Follow the weed size guideline on the Bromoxynil herbicide or Accent labels that are least restrictive.
Bromoxynil herbicide + Atrazine + Accent + Non-ionic surfactant	1 pint/A + ½ - 1 1/5 lb ai/A + 2/3 oz/A + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn preemergence or postemergence but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by Bromoxynil + Atrazine herbicide plus grasses and broadleaves controlled by Accent. For optimum weed control, treat when broadleaves and grasses are in the recommended growth stage or size. Follow the weed size guideline on the Bromoxynil herbicide or Accent labels that are least restrictive.
	1½ pints/A + ½ - 1 1/5 lb ai/A + 2/3 oz/A + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn between the 4-leaf stage of crop growth but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	
Bromoxynil herbicide + Beacon® + Non-ionic surfactant	1 pint/A + 0.38 – 0.76 oz/A <sup>1</sup> (1-2 packets/4 acres) + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn from 4 to 20 inches in height. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by Bromoxynil herbicide at 1 pint/A plus grasses and broadleaves controlled by Beacon. For optimum weed control treat when broadleaves and grasses are in the recommended growth stage or size. Follow the weed size guidelines on the Bromoxynil herbicide or Beacon labels that are least restrictive.

**ADDITIONAL BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

(Continued)	APPLICATION TIMING AND SPECIFIC COMMENTS		
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide + Exceed® + Non-ionic surfactant	¾ - 1 pint/A + 0.5 – 1.0 oz/A + 1 qt/100 gals of water (0.25% v/v)	Apply to field corn from 4 to 48 inches in height and before tasseling, whichever comes first. Do not apply this tank mix to sorghum.	Addition of Exceed at 0.5 ounce/A to Bromoxynil herbicide ¾ – 1 pint/A will control all weeds on the Bromoxynil herbicide label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Exceed at 1.0 ounce/A to Bromoxynil herbicide at ¾ - 1 pint./A will control all weeds on both the Bromoxynil herbicide and Exceed labels. Follow the weed size guidelines on the Bromoxynil herbicide and Exceed labels that are least restrictive.
Bromoxynil herbicide	¾ - 1 pint/A	Apply to field corn from the 3-	Addition of Permit at 1/3

<p>+ Permit® + Non-ionic surfactant</p>	<p>+ 1/3 – 2/3 oz/A + 1 qt/100 gals of water (0.25% v/v)</p>	<p>leaf stage to layby. Do not apply this tank mix to sorghum.</p>	<p>ounce/A to Bromoxynil herbicide at 3/4 – 1 pint/A will control all weeds on the Bromoxynil herbicide label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Permit at 2/3 ounce/A to Bromoxynil herbicide at 3/4 - 1 pint/A will control all weeds on both the Bromoxynil herbicide and Permit labels. Follow the weed size guidelines on the Bromoxynil herbicide and Permit labels that are least restrictive.</p>
<p>Bromoxynil herbicide + Stinger®</p>	<p>1 pint/A + 1/3 – 2/3 pint/A</p>	<p>Apply to field corn after emergence up to 24 inches in height. Do not apply this tank mix to sorghum.</p>	<p>All weeds controlled by Bromoxynil herbicide at recommended rates of application plus improved Canada thistle burndown. For optimum performance apply to Canada thistle at least 4 inches in diameter or height but before bud stage.</p>
	<p>1½ pints/A + 1/3 – 2/3 pint/A</p>	<p>Apply to field corn from 4-leaf stage up to 24 inches in height. Do not apply this tank mix to sorghum.</p>	
<p>Bromoxynil herbicide + Atrazine + Stinger®</p>	<p>1pint/A + ½ - 1 1/5 lb ai/A + 1/3 – 2/3 pint/A</p>	<p>Apply to field corn after emergence but before corn is 12 inches tall. Do not apply this tank mix to sorghum.</p>	<p>All weeds controlled by Bromoxynil + Atrazine Tank mixtures at recommended rates of application plus improved Canada thistle burndown. For optimum performance apply to Canada thistle at least 4 inches in diameter or height but before bud stage.</p>
	<p>1½ pints/A + ½ - 1 1/5 lb ai/A + 1/3 – 2/3 pint/A</p>	<p>Apply to field corn from 4-leaf stage but before corn is 12 inches tall. Do not apply this tank mix to sorghum.</p>	

**ADDITIONAL BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

(Continued)

		<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>	
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
<p>Bromoxynil herbicide + Pursuit® + Non-ionic surfactant + UAN Fertilizer solution</p>	<p>¾ - 1 pint + 4 oz/A + 1 qt/100 gals + 1-2 qts/A</p>	<p>Apply this tank mix only on field corn hybrids possessing resistance to Pursuit herbicide. Contact your seed supplier for further information. Apply this tank mix to corn between the 3-leaf to 8-leaf stage of growth. Do not use crop oil concentrates when applying Bromoxynil herbicide + Pursuit tank mixtures.</p>	<p>This tank mix will control all broadleaf weeds listed as controlled by Bromoxynil herbicide at 1 pint/A plus giant foxtail, redroot pigweed, and other grass and broadleaf weeds listed on the Pursuit label.</p>
<p>Bromoxynil herbicide + Bladex® 80W Or Bladex® 90DF</p>	<p>1 pint/a + 1½ - 2½ lb/A<sup>1</sup> or 1 3/10 – 2 1/5 lb/A<sup>1</sup></p>	<p>Apply to field corn between the 3-leaf stage but before the fifth leaf is visible in the whorl. Tank mixture with Bladex or Extrazine may cause browning, yellowing or stunting of field corn. Do not</p>	<p>All weeds controlled by Bromoxynil herbicide at 1½ pints/A plus suppression or control of foxtails and other annual grasses that do not exceed 1½ inches in height.</p>

<p>Bromoxynil herbicide + Extrazine® II DF or Extrazine® 90DF</p>	<p>1 pint/A + 1 3/10 – 2 1/5 lb/A<sup>1</sup></p>	<p>apply Bromoxynil herbicide in tank mixture with Bladex or Extrazine under cold, wet weather conditions or to weather, storm, disease or insect-stressed field corn. Do not add adjuvants such as surfactants or crop oils or fertilizer solutions as excessive crop injury may occur. Do not apply to popcorn or corn grown for seed.</p>	<p>Determine the Bladex or Extrazine use rate by consulting the tank mixture product use directions for soil texture, organic matter and previous herbicide application to that crop.</p>
<p>Bromoxynil herbicide + Roundup®</p>	<p>Preemergence 1 – 1½ pints/A + ½ - 3 pints/A</p>	<p>Apply to corn or sorghum before planting time up until just prior to crop emergence.</p>	<p>All weeds controlled by Bromoxynil herbicide at recommended rates of application plus control of certain grass and perennial weeds. Refer to roundup label for rate to use depending on weeds present at time of application.</p>

**RESTRICTIONS AND PRECAUTIONS: Corn, (Field and Pop) and Sorghum (Grain and Forage), and Sudangrass**

- Bromoxynil herbicide does not control grasses. Therefore, it is recommended that a suitable grass control program be used to provide any required grass control.
- Addition of a spray additive or mixture with liquid fertilizers may cause excessive crop leafburn.
- Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed production inbred lines to Bromoxynil herbicide.
- Do not apply Bromoxynil herbicide 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 plant rotational crops within 30 days following Bromoxynil herbicide application.
- Do not cut crop for feed, fodder or graze within 45 days of application.
- The total cumulative rate should not exceed 2 pints/A per season.
- Postemergence application prior to the 3-leaf growth stage of corn or sorghum may result in increased crop leaf burn.
- Tank mixtures with Accent/nonionic surfactant or Beacon/nonionic surfactant may result in increased initial crop leaf burn. Use of crop oil concentrate, nitrogen fertilizer solution, or other adjuvants in Bromoxynil herbicide + Accent or Bromoxynil herbicide + Beacon tank mixtures may result in a further increase in crop leaf burn.
- Special care should be taken when using Bromoxynil herbicide and Banvel, Clarity, or 2,4-D tank mixtures to avoid off target drift to sensitive crops.
- Tank mixtures with 2,4-D, Banvel, or Clarity can cause stalk brittleness to field corn. Tank mixtures with 2,4-D and Banvel, can cause stalk brittleness to sorghum. Winds or cultivation may cause breakage while crop is brittle.
- Follow all restrictions and precautions on the label of all products used in tank mixture with Bromoxynil herbicide.
- Do not apply Bromoxynil herbicide at any rate to sorghum after the preboot stage of growth (growth stage 4) as severe crop injury, including loss of crop yield may result.
- Do not apply the 2 pints/A rate of Bromoxynil herbicide to sorghum.
- Do not apply the Bromoxynil herbicide + Pursuit tank mix except to field corn hybrids known to possess resistance to Pursuit, or severe crop injury may result.

**SMALL GRAINS  
(WHEAT, BARLEY, OATS, RYE, AND TRITICALE)**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS

Bromoxynil herbicide	1 – 2 pints/A	Spring seeded wheat, barley, oats, rye and triticale. Use in all states except Idaho, Oregon, Washington, Colorado, Wyoming, and Montana. Apply from emergence up and prior to the boot stage.	Apply 1 pint/A to MOST SUSCEPTIBLE and 1½ - 2 pints/A to SUSCEPTIBLE weeds that do not exceed the 4-leaf stage or 2 inches in height, whichever comes first. If weed forms rosette, apply before weeds exceed 1 inch in diameter. Use Bromoxynil herbicide at 1½ – 2 pints/A for control of kochia that is 2-4 inches in height and pigweed that does not exceed the 4-leaf stage or 2 inches in height, whichever comes first.
	1½ - 2 pints/A	Fall seeded wheat, barley, oats, rye and triticale throughout the United States. Apply from emergence to the boot stage. Spring seeded wheat, barley, oats, rye and triticale in Idaho, Oregon, Washington, Colorado, Wyoming, and Montana. Apply from emergence up and prior to the boot stage.	Apply to MOST SUSCEPTIBLE weeds (see GENERAL WEED LIST) up to the 8-leaf stage or 4 inches in height, whichever comes first. If weed forms rosette apply before weeds exceed 2 inches in diameter. Apply to SUSCEPTIBLE broadleaf weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**(Continued) BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	Chemigation 2 pints/A only	Apply to wheat, barley, oats, rye and triticale from emergence to the boot stage. Apply through automated sprinkler irrigation systems with a mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTURCTIONS section for complete details.	Apply to MOST SUSCEPTIBLE broadleaf weeds up to the 8-leaf stage or 4 inches in height or 2 inches in diameter, whichever comes first. Apply to SUSCEPTIBLE broadleaf weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first. Do not use chemigation for control of weeds that exceed 4 inches in height because control may be unacceptable.
	Small Grains underseeded with Alfalfa 1-1½ pints/A	Apply to small grains (wheat, barley, oats, rye or triticale) underseeded with alfalfa after small grains emergence up to the boot stage and when underseeded alfalfa has a minimum of 4 trifoliolate leaves. Follow all precautions and restrictions listed under the small grains and seedling alfalfa sections.	Apply 1 pint/A to MOST SUSCEPTIBLE and 1½ pints/A to SUSCEPTIBLE broadleaf weeds that do not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

22/37

Bromoxynil herbicide + 2,4-d (such as Weedone® and Weedar® brand herbicide	1-2 pints/A + ¼ - ½ lb ai/A	Apply to wheat, barley, oats and rye from the fully tillered but before jointing stage.	This tank mix improves control of mustards and pigweed. Apply to weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
Bromoxynil herbicide + 2,4-d (such as Weedone and Weedar brand herbicide	¾ - 1 pint/A + ¼ - ½ lb ai/A	Apply to wheat and barley in Minnesota, North and South Dakota from the fully tillered but before jointing stage.	This tank mix improves control of wild buckwheat, redroot pigweed and wild mustard. Apply to weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
Bromoxynil herbicide + MCPA (Such as Rhonox® or Rhomene®)	1-2 pints/A + ¼ - ½ lb ai/A	Apply to wheat, barley, oats and rye from the 4-leaf stage but before jointing.	This tank mix improves control of mustards, pigweed and kochia. Apply to weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
Bromoxynil herbicide + Banvel®	1 - 1½ pints/A + 1/8 - ¼ pint/A	Fall seeded wheat apply prior to the jointing stage. Spring seeded wheat apply up to the 5-leaf stage.	This tank mix improves control of broadleaves such as prostrate knotweed. Apply to weeds up to the 4- leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**(CONTINUED) BROMOXYNIL HERBICIDE RECOMMENDATIONS**

<b>PRODUCT</b>	<b>RATE</b>	<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>	
		<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide + Glean® + Non-ionic surfactant	¾ - 1 ½ pints/A + 1/6 - 1/3 oz/A + 1 qt/100 gals of water	Apply to wheat and barley from the 2- leaf stage but before boot stage. Refer to Glean label for crop rotation and other restrictions.	This tank mix improves control of broadleaves such as henbit, tansy mustard and pigweed. Apply to weeds up to the 4-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Bromoxynil herbicide + Ally® + Non-ionic surfactant	¾ - 1 ½ pints/A + 1/10 oz/A + 1 qt/100 gals of water	Apply to wheat and barley from the 2- leaf stage but before boot stage. Refer to Ally label for crop rotation and other restrictions.	This tank mix improves control of broadleaves such as tansy mustard and pigweed. Apply to weeds up to the 4 leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Bromoxynil herbicide + Finesse® + Non-ionic surfactant	¾ - 1 ½ pints/A + 1/6 - 1/3 oz/A + 1 qt/100 gals of water	Apply to wheat and barley from the 2- leaf stage but before boot stage. Refer to Finesse label for crop rotation and other restrictions.	This tank mix improves control of broadleaves such as tansy mustard, henbit, chickweed and pigweed. Apply to weeds up to the 4- leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Bromoxynil herbicide	¾ - 1 ½ pints/A	Apply to wheat and barley after the 3-	This tank mix improves

+ Amber® + Non-ionic surfactant	+ 0.28 – 0.56 oz/A + 0.25 – 0.5% v/v	leaf stage but before the flagleaf is visible. Refer to Amber label for crop rotation and other restrictions.	control of broadleaves such as tansy mustard, henbit, and pigweed. Apply to weeds up to the 4-leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first.
Bromoxynil herbicide + Express® + Non-ionic surfactant	1- 1½ pints/A + 1/6 – 1/3 oz/A + 1 qt/100 gals of water	Winter wheat. Apply after crop is in the 2-leaf stage but before the flag leaf is visible. Refer to Express label for crop rotation and other restrictions.	This tank mix improves control of broadleaf weeds such as redroot pigweed, tansy mustard and suppression of Canada thistle. Apply to annual weeds up to the 4-leaf stage, 4 inches tall or across, whichever comes first, and to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new growth.
	¾ - 1½ pints/A + 1/6 – 1/3 oz/A + 1 qt/100 gals of water	Spring wheat and barley. Apply after crop is in the 2-leaf stage but before the flag leaf is visible. Refer to Express label for crop rotation and other restrictions.	
Bromoxynil herbicide + Harmony® Extra + Non-ionic surfactant	¾ - 1½ pints/A + 3/10 – ½ oz/A + 1 qt/100 gals of water	Winter wheat. Apply after the 2 leaf stage but before the 3 <sup>rd</sup> node is detectable. Refer to the Harmony Extra label for crop rotation and other restrictions. Spring wheat and barley. Apply after the 2-leaf stage but before the 1 <sup>st</sup> node is detectable. Refer to the harmony Extra label for crop rotation and other restrictions.	This tank mix improves control of broadleaf weeds such as henbit, chickweed and redroot pigweed. Apply to weeds up to the 4-leaf stage, 4 inches in height or across, whichever comes first.

(CONTINUED) BROMOXYNIL HERBICIDE RECOMMENDATIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide + Curtail® or Curtail® M <sup>4</sup>	1- 1½ pints/A + 2 pints/A	Apply to wheat and barley after the crop begins to tiller up to the 1 <sup>st</sup> node detectable.	This tank mix improves control of kochia, wild buckwheat and Canada thistle. Apply to annual broadleaf weeds up to the 8 leaf stage up to 4 inches in height or 2 inches in diameter and Canada thistle in the rosette to prebud stage.
Bromoxynil herbicide + metribuzim (Sencor® or Lexone®)	1 – 1 ¼ pints/A + 1/8 – ¼ lb ai/A	Winter wheat in Idaho, Montana, Oregon and Washington. Apply in spring after growth has started and secondary roots with a minimum of 3 to 4 tillers have been established but before boot stage. Avoid application when crop has experienced winter kill, frost damage, disease or drought.	This tank mix improves control of broadleaves such as chickweed, filaree, henbit and dogfennel. Apply to weeds that do not exceed 2 inches tall or rosettes of 2 inches in diameter. The higher use rates of both products should be used only in emergency weed situations and if some minor crop injury is acceptable. A recognized authority should be consulted concerning the use of this mixture in your area.

Bromoxynil herbicide + diruon	1 pint/A + 4/10 lb ai/A	Winter wheat and winter barley in Idaho, Oregon and Washington. Use only in areas where annual rainfall exceeds 16 inches. One fall application after emergence but before soil freezes or in spring as soon as soil thaws.	This tank mix improves control of broadleaves weeds such as henbit and growwell. Apply to weeds before they are 2 inches tall or 2 inches in diameter.
Bromoxynil herbicide + Tiller®	1 pint/A + 1 pint/A	Spring wheat. Apply when crop begins to tiller (3 to 4-leaf stage) up to the 6-leaf stage. Refer to the Tiller label for complete use directions and restrictions.	In addition to broadleaf weeds controlled by Bromoxynil herbicide, this tank mix will control green foxtail from the 2-leaf to 2-tiller stage of growth.
Bromoxynil herbicide + Hoelon®	1-2 pints/A + 2 2/3 pints/A	Spring barley. After emergence but before jointing. Avoid using this tank mixture on barley exposed to cold (lower than 40 degrees F) and/or prolonged wet weather conditions as crop injury may result.	This tank mix will provide wild oat, green foxtail and annual ryegrass control in addition to broadleaves. Apply to grasses 1to3-leaf stage and broadleaves no larger than 4-leaf stage or rosettes of 1.5 inches in diameter.
	1-2 pints/A + 2 2/3 - 3 1/3 pints/A	Winter wheat and spring wheat. After emergence but before jointing.	
Bromoxynil herbicide + Hoelon + Crop Oil concentrate	1-2 pints/A + 2-2 2/3 pints/A + 1-2 pints/A	Winter wheat and spring wheat. After emergence but before jointing. Use a minimum of 10 gallons of spray volume per acre. <b>DO NOT USE ON BARLEY</b>	

**(CONTINUED) BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide + Avenge®	1-2 pints/A + 2 1/2-4 pints/A	<p>Winter Wheat. Four leaf to tillering stage. Refer to Avenge label for varietal and other restrictions.</p> <p>Spring Wheat. Five to 6-leaf stage. Refer to Avenge label for varietal and other restrictions.</p> <p>Barley. Two to 7 leaf stage.</p>	This tank mix will provide wild oat control in addition to broadleaves. Apply to wild oats in the 3 to 5-leaf stage and broadleaves that do not exceed the 4-leaf stage or rosettes of 1.5 inches in diameter. Avenge use rates per acre are 2.5 pints (1-10 oats per sq. ft.), 3 pints (11-25 oats per sq. ft.) or 4 pints (more than 25 oats per sq. ft.).

**RESTRICTIONS AND PRECAUTIONS: Small grains (Wheat, Barley, Oats, Rye, and Triticale)**

- Do not graze treated fields within 45 days following treatment.
- Do not apply when crops are under moisture stress.
- Do not apply when crop canopy covers the weeds as poor weed control will result.
- Do not apply when underseeded alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover application.
- Do not add a surfactant or crop oil when applying to underseeded alfalfa or increased injury will occur.
- Do not cut for feed or graze spring treated underseeded alfalfa within 30 days following treatment.
- Do not cut for feed or graze fall or winter treated underseeded alfalfa until spring, at least 60 days following treatment.
- *Reduced weed control may occur when weeds are stressed from lack of moisture or cold temperatures.*
- Refer to labels of products used in tank mixture of additional restrictions and precautions.
- Do not plant rotational crops within 30 days following Bromoxynil herbicide application.



29/37

- The total cumulative rate should not exceed 2 pints/A per season.

**FORAGE, FIBER AND SPECIALITY CROPS  
ALFALFA (SEEDLING)**

BROMOXYNIL HERBICIDE RECOMMENDATIONS		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	1 – 1½ pints/A	<p>In the states of California, Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico, and the western halves of North Dakota, South Dakota, Nebraska and Kansas:</p> <p>Apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliates. Unacceptable crop injury may occur to alfalfa seedlings less than the 2 trifoliolate stage. Bromoxynil herbicide application made when temperatures are expected to exceed 80°F at and 3 days following application can result in unacceptable crop injury.</p> <p>In the remaining states, apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 4 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. If you are unsure of growth stage conditions, contact your local extension service. Bromoxynil herbicide applications made when temperatures are expected to exceed 70°F at and 3 days following application can result in unacceptable crop injury.</p> <p>Follow all other use directions listed on the Bromoxynil herbicide label.</p>	<p>Apply 1 pint/A to MOST SUSCEPTIBLE broadleaf weeds and 1½ pints/A to SUSCEPTIBLE broadleaf weeds (See GENERAL WEED LIST) when weeds do not exceed 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first. Bromoxynil herbicide will not adequately control over-wintered pennycress, henbit and mustards.</p>
Bromoxynil herbicide	Chemigation only 2 pints/A	<p>Apply to seedling alfalfa with a minimum of 2 trifoliolate leaves. Apply through automated sprinkler irrigation systems with a mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTRUCTIONS Section for complete details. Bromoxynil herbicide applications made when temperatures are expected to exceed 85°F at and 3 days following application can result in unacceptable crop injury.</p>	<p>Apply to MOST SUSCEPTIBLE broadleaf weeds up to the 8 leaf stage, 4 inches in height or 2 inches in diameter, whichever comes first. Apply to SUSCEPTIBLE broadleaf weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.</p>

(CONTINUED)

BROMOXYNIL HERBICIDE RECOMMENDATIONS		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	1 pint/A	Apply in the fall or spring to seedling	This tank mix improves

26/37

<p>+ Butyrac® 200 (2,4-DB)</p>	<p>+ 1 quart/A</p>	<p>alfalfa when the majority of the field has a minimum of 4 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. If you are unsure of growth stage conditions, contact your local extension service. In the states of California, Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico, and the western halves of North Dakota, South Dakota, Nebraska and Kansas, Bromoxynil herbicide application made when temperatures are expected to exceed 80°F at and 3 days following application can result in unacceptable crop injury. In the remaining states Bromoxynil herbicide applications made when temperatures are expected to exceed 70°F at and 3 days following application can result in unacceptable crop injury. Rainfall or overhead irrigation within 7-10 days following a Butyrac 200 application can cause unacceptable crop injury.</p>	<p>control of pigweed species, kochia, and tansy mustard. Apply when weeds do not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first. Bromoxynil herbicide + Butyrac 200 tank mixtures will not adequately control over-wintered pennycress, henbit and mustards.</p>
<p>Bromoxynil herbicide + Pursuit + Non-ionic surfactant</p>	<p>¾ - 1 pint/A + 3-6 oz/A + 1 qt/100 gals</p>	<p>In the states of California, Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico, and the western halves of North Dakota, South Dakota, Nebraska and Kansas:  Apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliolates. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa treated prior to the second trifoliolate stage of growth. If you are unsure of growth stage conditions, contact your local extension service. Bromoxynil herbicide + Pursuit applications made when temperatures are expected to exceed 80°F at the 3 days following application can result in unacceptable crop injury.</p>	<p>This tank mix will control MOST SUSCEPTIBLE broadleaf weeds (See GENERAL WEED LIST) when weeds do not exceed 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first; and other grass and broadleaf weeds listed on the Pursuit label. Weeds should be 1-3 inches tall for optimum control.</p>

(CONTINUED)

BROMOXYNIL HERBICIDE RECOMMENDATIONS		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
<p>Bromoxynil herbicide + Pursuit +</p>	<p>½ - ¾ pint/A + 3-6 oz/A +</p>	<p>In all states except California, Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico, and</p>	<p>Bromoxynil herbicide at ½ pint/A tank mixed with Pursuit will control common lambsquarters up to 2</p>

Non-ionic surfactant	1 qt/100 gals	<p>the western halves of North Dakota, South Dakota, Nebraska and Kansas:</p> <p>Apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa treated prior to the second trifoliolate stage of growth. If you are unsure of growth stage conditions, contact your local extension service. Bromoxynil herbicide + Pursuit applications made when temperatures are expected to exceed 70°F at and 3 days following application can result in unacceptable crop injury.</p>	<p>inches in height plus weeds listed on the Pursuit label.</p> <p>Bromoxynil herbicide at ¾ pint/A + Pursuit will control the MOST SUSCEPTIBLE annual broadleaf weeds (See GENERAL WEED LIST) when weeds do not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first; plus weeds listed on the Pursuit label.</p> <p>Application should be made when the majority of the weeds are 1-3 inches tall and when common lambsquarters do not exceed 4 inches in height. For low growing weeds (such as mustards), apply before the rosette exceeds 3 inches in diameter.</p> <p>Refer to the Pursuit label for a list of susceptible weeds at each of the recommended rates.</p>
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**RESTRICTION AND PRECAUTIONS: Alfalfa (Seedling)**

- Crop leafburn can occur following Bromoxynil herbicide application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected. Alfalfa yield should not be reduced although total biomass tonnage may decrease compared to a weedy field due to weed removal.
- Do not apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.
- Do not add a surfactant or crop oil unless specified in the use directions because increased alfalfa injury will occur.
- Do not cut for feed or graze spring treated alfalfa within 30 days following treatment.
- Do not cut for feed or graze fall or winter treated alfalfa until spring, at least 60 days following treatment.
- The total cumulative rate of Bromoxynil herbicide should not exceed 2 pints/A per season.
- The use of Eptam preemergence may enhance crop leaf burn from postemergence application of Bromoxynil herbicide and should be considered prior to using Bromoxynil herbicide.
- Follow all restrictions and precautions on the tank mixture product label when a Bromoxynil herbicide tank mixture is used.
- Tank mixture with 2,4-DB may result in unacceptable crop leaf burn especially under warm, humid weather conditions.
- Bromoxynil herbicide alone can be applied to seedling alfalfa that has been underseeded into small grains that include wheat, barley, oats, rye, and triticale. See application restrictions under the SMALL GRAIN section.
- Rainfall or overhead irrigation within 7-10 days following Butyrac 200 application can cause unacceptable crop injury.

**FLAX (*Linum usitatissimum* only)**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	1 pint/A	Apply to flax that is 2 to 8 inches in height. Do not apply Bromoxynil	Apply to MOST SUSCEPTIBLE weeds that

28/37

		herbicide to flax during or after the bud stage.	do not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
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**BROMOXYNIL TANK MIXTURE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide + Poast® + Crop Oil Concentrat Or Dash®	1 pint/A + 1 – 1½ pints/A + 2 pints/A or 2 pints/A	Apply to flax that is 2 to 8 inches in height. Do not apply this tank mix to flax during or after the bud stage, or within 75 days of flax harvest.	This tank mix will control broadleaf weeds plus grassy weeds listed on the Poast label. Apply to MOST SUSCEPTIBLE broadleaf weeds (see list on the Bromoxynil herbicide label) that do not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**RESTRICTIONS AND PRECAUTIONS: Flax (*Linum usitatissimum* only)**

- Do not apply if temperatures are expected to exceed 85°F at or 3 days following application or crop injury may occur.
- Unacceptable crop injury may occur following Bromoxynil herbicide application to flax grown on high organic, peat type soils.
- Application under high humidity conditions can injure flax.
- Unless otherwise instructed, do not apply Bromoxynil herbicide to flax with crop oil concentrate, surfactants or nitrogen solutions.
- Do not use on ornamental flax.
- Follow all precautions, directions and restrictions on the Poast label when using this tank mixture with Bromoxynil herbicide.

**GARLIC**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	1½ - 2 pints/A	Apply to garlic after emergence but before 12 inches in height.	Apply to MOST SUSCEPTIBLE and
Bromoxynil herbicide (Only for garlic grown in muck soils in Northeastern United States)*	1½ - 2 pints/A	Apply to garlic after emergence but before 12 inches in height.  *May be harvested 60 days after treatment.	SUSCEPTIBLE broadleaf weeds up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**RESTRICTIONS AND PRECAUTIONS: Garlic**

- Use a minimum of 20 gallons per acre for ground application.
- Bromoxynil herbicide can be applied through automated sprinkler irrigation application.
- Do not harvest within 112 days following treatment (except garlic grown in muck soils in Northeastern United States).

**MINT**

**(ESTABLISHED PEPPERMINT AND SPEARMINT ONLY)**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	RATE	CROP	WEEDS
Bromoxynil herbicide	1 – 1½ pints/A	Apply to dormant or actively growing established peppermint or spearmint crops that exhibit good vigor.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE weeds up

	Chemigation 2 pints/A only	Apply to dormant or actively growing established peppermint or spearmint crops that exhibit good vigor.  Apply through automated sprinkler irrigation systems with a mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTRUCTIONS section for complete details.	to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
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**RESTRICTIONS AND PRECAUTIONS: Mint**

- Application made to mint when temperatures are expected to exceed 70°F at or 5 days following application may result in unacceptable crop injury. This injury is more likely to occur following Bromoxynil herbicide application in the spring.
- Do not apply to mint growing under adverse conditions including diseases, insects, nematodes, high salt content soil, drought, excessive moisture, winter damage or other environmental stress.
- Application of Bromoxynil herbicide to mint should not be made within two weeks of a Sinbar application or unacceptable crop injury may result.
- Do not use in spring on newly established mint. Fall applications to spring planted mint should be acceptable if the crop is well established.
- Bromoxynil herbicide can cause temporary stunting and discoloration of the mint particularly from the spring application. However the injury symptoms are only temporary and have not caused yield reduction.
- Use of Bromoxynil herbicide in combination with other products may increase temporary stunting and discoloration.
- Do not harvest within 70 days following treatment.
- Do not apply more than 6 pints of Bromoxynil herbicide per acre to mint in a single growing season.

**ONIONS**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>			
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide	Preemergence 1 – 1½ pints/A	Preemergence use is restricted to onions grown east of the Mississippi River only on muck soils containing greater than 10% organic matter. Apply at least 3 to 4 days prior to emergence. Rainfall or irrigation within 2 days following preemergence applications or 3 days prior to crop emergence may result in unacceptable crop injury. Preemergence applications can be applied using either ground or aerial equipment.	Apply Bromoxynil herbicide at 1 pint/A to control MOST SUSCEPTIBLE weeds and 1½ pints/A for SUSCEPTIBLE weeds. Weeds should not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

**(CONTINUED) BROMOXYNIL HERBICIDE RECOMMENDATIONS**

<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>			
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide	Postemergence 1 – 1½ pints/A	Apply only to onions which have 2 to 5 true leaves.  Use at least 50-70 gallons of water per acre and apply by ground equipment or chemigation only. Water volume is important- <b>CONCENTRATED SPRAYS KILL ONIONS.</b> Thorough and uniform coverage is necessary for good weed control.	Apply Bromoxynil herbicide at 1 pint/A to control MOST SUSCEPTIBLE weeds and 1½ pints/A for SUSCEPTIBLE weeds. Weeds should not exceed the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

30/37

		In onion-producing areas, certain environmental conditions reduce development of waxy coating on the onion leaves, thus increasing the possibility of injury. Dry soil, dry onion foliage, high light intensity, low humidity, and high temperatures tend to increase the waxy coating on onion leaves and thus reducing chances for injury. It is essential that the soil and onion foliage be dry at the time of application. Humidity should be low and dew should be off the plants.	
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**RESTRICTONS AND PRECAUTIONS: Onions**

- The sensitivity of onions to Bromoxynil herbicide varies with the variety and environmental conditions. Therefore, even if all the label directions are followed, Bromoxynil herbicide application still may cause injury to onions under certain circumstances.
- Do not irrigate onions that have received a preemergence application of Bromoxynil herbicide for 2 days following application or within 3 days of crop emergence.
- Do not apply Bromoxynil herbicide preemergence to onions grown West of the Mississippi River.
- Do not use Bromoxynil herbicide on onions grown under low light intensity, in areas such as Oregon, west of the Cascades.
- Do not treat onions damaged by sand, insects, or diseases.
- Do not apply postemergence applications of Bromoxynil herbicide to onions with aerial equipment.
- Do not add surfactant.

**GRASS CROPS**

**CONSERVATION RESERVE PROGRAM (CRP) AREAS**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>	
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide	1 – 2 pints/A	Apply to grasses after emergence. If alfalfa is planted apply after the 4 trifoliolate leaf stage.	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.

**(CONTINUED) BROMOXYNIL HERBICIDE RECOMMENDATIONS**

		<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>	
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide	Chemigation 2 pints/A only	Apply to grasses after emergence. If alfalfa is planted apply after the 4 trifoliolate leaf stage.  Apply through automated sprinkler irrigation systems with a mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTRUCTIONS section for complete 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.

**BROMOXYNIL HERBICIDE TANK MIXTURE RECOMMENDATIONS**

		<b>APPLICATION TIMING AND SPECIFIC COMMENTS</b>	
<b>PRODUCT</b>	<b>RATE</b>	<b>CROP</b>	<b>WEEDS</b>
Bromoxynil herbicide + Rhomene®	1 – 2 pints/A + ¼ to ½ pint/A	Apply to CRP areas after grasses have reached the 3-leaf stage. Do not use this tank mixture in areas	This tank mix improves control of mustards, pigweed, and kochia. Apply

Or Rhonox® (MCPA)		where alfalfa or other legumes have been planted.	up to the 4-leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
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**RESTRICTIONS AND PRECAUTIONS: CRP Areas**

- Do not allow livestock to graze in treated areas or feed treated grasses, forage, hay, straw, silage, or seed to livestock.
- Do not add spray adjuvants or fluid fertilizers when applying Bromoxynil herbicide to CRP areas planted with alfalfa or other legumes.
- Do not apply Bromoxynil herbicide to CRP areas planted with alfalfa if temperatures are expected to exceed 80°F or severe crop injury may occur. If legumes other than alfalfa have been planted, severe crop injury may occur at any application temperature.
- Do not apply more than 1½ pints/A of Bromoxynil herbicide to CRP areas that are underseeded with alfalfa.

**GRASSES GROWN FOR SEED OR SOD PRODUCTION**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS-Seedling and Established Grasses**

PRODUCT	RATE		APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 sq. ft.	CROP	WEEDS
Bromoxynil herbicide	1 to 2 pints	0.375 to 0.75 fl. oz.	Apply to established and newly seeded grasses grown for seed or sod production before the boot stage. Established grasses tolerant to Bromoxynil herbicide include bentgrasses, Kentucky blugrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass and Zoysiagrass. Bromoxynil herbicide may also be used on seedling grasses such as Merion, Park, Delta, or common Kentucky Bluegrasses, Pennlawn, Chewings, Illahee or Alta Fescues, Orchard grass, Highland, Seaside or Astoria Bentgrasses, perennial Ryegrasses, Bahiagrass and Zoysiagrass.	Refer to the GENERAL WEED LIST for a listing of susceptible broadleaf weeds. Optimal control will be attained when weeds are treated in the seedling stage (less than 4-leaf stage, 2 inches in height, or 1 inch in diameter).

**(CONTINUED) BROMOXYNIL HERBICIDE RECOMMENDATION-SEEDLING AND ESTABLISHED GRASSES**

PRODUCT	RATE		APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 sq. ft.	CROP	WEEDS
Bromoxynil herbicide	Chemigation 2 pints/A only	0.75 fl. oz.	Apply to established and newly seeded grasses grown for seed or sod production before the boot stage. Apply through automated sprinkler irrigation systems with mechanical transfer loading system only. See MIXING, LOADING, AND HANDLING INSTRUCTIONS section for complete details. Refer to the list of established grasses that are tolerant to Bromoxynil herbicide.	

**RESTRICTIONS AND PRECAUTIONS: Grasses grown for seed or sod production**

- Do not allow livestock to graze in treated areas or feed treated grasses, forage, hay, straw, silage, or seed to livestock.
- Do not apply Bromoxynil herbicide to grasses grown for seed or sod production with backpack or hand-held application equipment.

**NON-RESIDENTIAL TURFGRASS**

**BROMOXYNIL HERBICIDE RECOMMENDATIONS**

**Seedling and Established Non-Residential Turfgrass**

PRODUCT	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 Sq. Ft.	CROP	WEEDS
Bromoxynil herbicide	1 to 2 pints/A	0.375 to 0.75 fl. oz.	Apply to established and newly seeded non-residential turfgrass when weeds are small and actively growing. Established turfgrasses that are tolerant to Bromoxynil herbicide include bentgrasses, Kentucky bluegrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass and Zoyiagrass. Bromoxynil herbicide may also be used on seedling grasses such as Merion, Park, Delta, or common Kentucky Bluegrasses, Pennlawn, Chewings, Illahee or Alta Fescues, Orchard grass, Highland, Seaside or Astoria Bentgrasses, perennial Ryegrasses, Bahiagrass and Zoysiagrass.	Refer to the GENERAL WEED LIST for a listing of susceptible broadleaf weeds. Optimal control will be attained when weeds are treated in the seedling stage (less than 4-leaf stage, 2 inches in height, or 1 inch in diameter).

**RESTRICTIONS AND PRECAUTIONS: Non-Residential Turfgrasses**

- Do not allow livestock to graze in treated areas or feed treated grasses, forage, hay, straw, silage, or seed to livestock.
- Do not apply Bromoxynil herbicide to non-residential turf with backpack or hand-held application equipment.

**BROMOXYNIL HERBICIDE TANK MIXTURES RECOMMENDATIONS**

**Established Non-Residential Turfgrass**

PRODUCT	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 Sq. Ft.	CROP	WEEDS



<p>Bromoxynil herbicide + Weedone DPC Ester</p>	<p>2 pints + 3 to 4 pints</p>	<p>0.75 fl. oz. + 1.125 to 1.5 fl. oz.</p>	<p>Apply to established non-residential turfgrass only. This treatment may cause injury to bentgrasses, St. Augustinegrass, centipede grass, and carpetgrass.</p>	<p>All weed species previously listed in the GENERAL WEED LIST for Bromoxynil herbicide plus the following species:</p> <p>Dandelion- (<i>Taraxacum officinale</i>) Plantains- (<i>Plantago spp.</i>) Ground Ivy- (<i>Glechoma hederacea</i>) Red Clover- (<i>Trifolium pratense</i>) White Clover- (<i>Trifolium repens</i>) Hop Clover- (<i>Trifolium agrarium</i>) Common Chickweed- (<i>Stellaria media</i>) Prostrate Spurge- (<i>Euphorbia supina</i>) Oxalis- (<i>Oxalis europaea</i>) Knotweed- (<i>Polygonum aviculare</i>)</p> <p>Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).</p>
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(CONTINUED) BROMOXYNIL HERBICIDE TANK MIXTURES RECOMMENDATIONS  
ESTABLISHED NON-RESIDENTIAL TURFGRASS

PRODUCT	RATE		APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 Sq. Ft.	CROP	WEEDS
Bromoxynil herbicide + MCPP	2 pints + 1.0 lb.ai	0.75 fl. oz. + 0.025 lb.ai.	Apply to established non-residential turfgrass only. This treatment is not recommended for use on St. Augustinegrass or centipedegrass	All weeds species previously listed in the GENERAL WEED LIST for Bromoxynil herbicide plus the following species:  Red Clover- ( <i>Trifolium pratense</i> ) White Clover- ( <i>Trifolium repens</i> ) Common Chickweed- ( <i>Stellaria media</i> ) Mouseear Chickweed- ( <i>Cerastium vulgatum</i> ) Ground Ivy- ( <i>Glechoma hederacea</i> ) Stitchwort- ( <i>Stellaria gramminea</i> ) Knotweed- ( <i>Polygonum aviculare</i> ) Prostrate Spurge- ( <i>Euphorbia supina</i> )  Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).
Bromoxynil herbicide + dicamba	2 pints + 0.125 to 0.25 lb. ai	0.75 fl. oz. + 0.006 to 0.012 lb. ai	Apply to established non-residential turfgrass only. This treatment may cause injury to bentgrass, St. Augustinegrass, centipedegrass, and carpetgrass.	All weeds species previously listed in the GENERAL WEED LIST for Bromoxynil herbicide plus the following species:  Red Clover- ( <i>Trifolium pratense</i> ) White Clover- ( <i>Trifolium repens</i> ) Common Chickweed- ( <i>Stellaria media</i> ) Mouseear Chickweed- ( <i>Cerastium vulgatum</i> ) Pepperweed- ( <i>Lepidium spp.</i> ) Knotweed- ( <i>Polygonum aviculare</i> )  Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).

35/37

**(CONTINUED) BROMOXYNIL HERBICIDE TANK MIXTURES RECOMMENDATIONS  
ESTABLISHED NON-RESIDENTIAL TURFGRASS**

PRODUCT	RATE		APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 Sq. Ft.	CROP	WEEDS
Bromoxynil herbicide + MCP + dicamba	2 pints + 0.5 to 1.0 lb ai + 0.125 to 0.25 lb ai	0.75 fl. oz. + 0.0125 to 0.025 lb ai + 0.003 to 0.006 lb ai	Apply to established non-residential turfgrass only. This treatment is not recommended for use on St. Augustinegrass or centipede grass.	All weed species previously listed in the GENERAL WEED LIST for Bromoxynil herbicide and Bromoxynil herbicide/Dicamba tank mixtures plus the following species:  Dandelion ( <i>Taraxacum officinale</i> ) Plantains ( <i>Plantago spp.</i> )  Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).
Bromoxynil herbicide + MCP + 2,4-D	2 pints + 0.5 to 1.0 lb ai + 0.5 to 1.0 lb ai	0.75 fl. oz. + 0.0125 to 0.025 lb ai + 0.0125 to 0.025 lb ai	Apply to established non-residential turfgrass only. This treatment is not recommended for use on St. Augustinegrass or centipede grass.	All weed species previously listed in the GENERAL WEED LIST for Bromoxynil herbicide and Bromoxynil herbicide/2,4-D tank mixtures plus the following species:  Dandelion ( <i>Taraxacum officinale</i> ) Plantains ( <i>Plantago spp.</i> ) Red Sorrel ( <i>Rumex acetosella</i> ) Knotweed ( <i>Polygonum aviculare</i> )  Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).  Optimal control of red sorrel will require the high use rate of 2,4-D or MCP.

**RESTRICTIONS AND PRECAUTIONS: Non-residential turfgrasses**

- Bromoxynil herbicide/Weedone DPC tank mixes are not allowed in California.
- Do not allow livestock to graze in treated areas or feed treated grasses, forage, hay, straw, silage, or seed to livestock.
- Do not apply Bromoxynil herbicide to non-residential turf with backpack or hand-held application equipment.

36/37

NON-CROPLAND  
NON-CROPLAND AND INDUSTRIAL SITES

BROMOXYNIL RECOMMENDATIONS

PRODUCT	RATE		APPLICATION TIMING AND SPECIFIC COMMENTS	
	Per ACRE	Per 1000 Sq. Ft.	CROP	WEEDS
Bromoxynil herbicide	1 to 2 pints	0.375 to 0.75 fl oz	Apply to non-cropland and industrial sites when weeds have emerged and are actively growing.	Refer to the GENERAL WEED LIST for a listing of susceptible broadleaf weeds. Use adequate spray volumes to ensure thorough coverage. Optimal control will be attained when weeds are treated in the seedling stage (less than 4-leaf stage, 2 inches in height, or 1 inch in diameter).

**RESTRICTIONS AND PRECAUTIONS: Non-cropland and Industrial Sites**

- Do not allow livestock to graze in treated areas or feed treated plant material to livestock.
- Addition of surfactant or crop oil concentrate may improve burndown of broadleaf weeds under cool, dry conditions.
- Do not apply Bromoxynil herbicide to non-cropland and industrial sites with backpack or hand-held application equipment.

**STORAGE AND DISPOSAL**

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. Store at temperatures above 3°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 Makhteshim-Agan or a registered establishment under contract to Makhteshim-Agan. After use, return the container to the point of purchase or designated locations. This container must only be refilled with Bromoxynil 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.

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL INFOTRAC AT (800) 535-5053.**

**WARRANTY STATEMENT**

MAKHTESHIM AGAN OF NORTH AMERICA warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of MAKHTESHIM AGAN OF NORTH AMERICA. To the extent allowed by law, MAKHTESHIM AGAN OF NORTH AMERICA shall not be liable for consequential, special, or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. In addition to the foregoing, no purchaser of this product (other than an end user) shall be entitled to any reimbursement for any loss suffered as a result of any suspension or cancellation of the registration for this product by the U.S. Environmental Protection Agency. Except as expressly provided herein, MAKHTESHIM AGAN OF NORTH AMERICA makes no warranties, guarantees, or representations of any kind, either expressed or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall be damages not exceeding the purchase price paid for this product or, at MAKHTESHIM AGAN OF NORTH AMERICA's election, the replacement of this product.



37/37

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