

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SEP 2 9 1997

Lee Tharrington Micro Flo Company P.O. Box 5948 Lakeland, FL 33807

Subject: BROMOX 2E

Registration Number 51036-256

Your submission dated March 7, 1997

Dear Mr. Tharrington:

)

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable, provided that you adhere to the following requirements:

- 1. You must list Sudangrass in the list of crops at the top of the first page of the label.
- 2. You must change the IF SWALLOWED section of the "STATEMENT OF PRACTICAL TREATMENT" to the following language:

IF SWALLOWED: Get medical attention. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Avoid alcohol.

3. You must change the HAZARDS TO HUMANS AND DOMESTIC ANIMALS section to the following language:

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

- 4. You must add a statement of the product net contents. It is recommended that you place this statement on the lower third of the front panel of the label.
- 5. In the table "ADDITIONAL BROMOX 2E TANK MIXTURE RECOMMENDATIONS", in the BROMOX 2E + Bladex 80W or Bladex 90DF and BROMOX 2E + Extrazine II DF or Extrazine 90DF rows, delete the superscript "1" following the 1 ½ 2 ½ and 1

 $3/10 - 2 \ 1/5 \ lb/A$  rates and before "Determine the Blandex..." There is no corresponding footnote in the text.

6. Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling 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 of my staff at 703-305-7801.

Sincerely,

Jim Tompkins

Product Manager (25)

Herbicide Branch

Registration Division (7505C)

#### BROMOX 2E

HERBICIDE FOR THE CONTROL OF CERTAIN BROADLEAF WEEDS IN 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 ACRES, NON-RESIDENTIAL TURFGRASS, AND NON-CROPLAND/INDUSTRIAL SITES.

Contains xylene range/petroleum distillates.

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

with COMMENTS to EPA Letter Dated

KEEP OUT OF REACH OF CHILDREN

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the peaticide registered under EPA Reg. No. 151036-256

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.)

### STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Get medical attention. Do not induce vomiting, contains petroleum distillates. Do not give anything by mouth to an unconscious person.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush with water for 15 minutes. Get medical attention.

EPA Reg. No. 51036-256

EPA Est. No. 51036-GA-1

Manufactured By:
MICRO FLO COMPANY
P.O. BOX 5948
LAKELAND, FL 33807

#### PRECAUTIONARY STATEMENTS

#### WARNING

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want options, follow the instructions for category G on EPA chemical resistance category selection chart. Applicators and other handlers must wear:

- 1. Coveralls over long-sleeved shirt and long pants
- 2. Chemical resistant gloves such as barrier laminate or viton gloves
- 3. Chemical resistant apron when cleaning equipment
- 4. Protective eyewear
- 5. Chemical resistant headgear for overhead exposure
- 6. 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.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. 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:

- 1. Coveralls over long-sleeved shirt and long pants
- 2. Chemical resistant gloves such as barrier laminate or viton gloves
- 3. Chemical-resistant footwear plus socks
- 4. Chemical-resistant headgear for overhead exposure
- 5. Protective eyewear

#### STORAGE AND DISPOSAL

#### STORAGE

Do not contaminate water, food or feed by storage or disposal. Do not store near fertilizers or seeds. Store at temperatures above 3F. 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 by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### RETURNABLE -- REFILLABLE CONTAINERS.

After use, return the container to the point of purchase or designated locations. This container must only be refilled with BROMOX 2E 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. For information on the disposal of unused, unwanted product, centact Micro Flo Company: If the container is not being refilled, return it to the point of purchase.

#### GENERAL INFORMATION

BROMOX 2E is formulated as an emulsifiable concentrate of octanoic acid ester of bromoxymil containing the equivalent of 2 pounds of bromoxymil per gallon.

BROMOX 2E is a selective postemergence herbicide for control of important broadleaf weeds

infesting field corn, popcorn, sorghum (grain and forage), small grains (wheat, barley, oats, rye, triticale), seedling alfalfa, flax, onions, garlic, mint (established peppermint and spearmint), Conservation Reserve Program (CRP) areas, and grasses grown for seed or sod production, non-residential turfgrass, and non-cropland and industrial sites. Optimum weed control is obtained when BROMOX 2E is applied to actively growing weed seedlings. BROMOX 2E is primarily a contact herbicide, therefore thorough coverage of the weed seedlings is essential for optimum control. BROMOX 2E 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 BROMOX 2E 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. Correct procedures for mixing and loading are provided in Micro Flo Company's Educational Program.

#### 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.

BROMOX 2E ALONE: Fill the spray tank 1/2 to 3/4 full with clean water. Begin agitation and add the recommended amount of BROMOX 2E. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application.

TANK MIXTURES: BROMOX 2E can be applied in tank mixture with many other herbicides and insecticides registered for use on approved crops. Refer to the specific crop section for rate recommendations and other restrictions. To apply BROMOX 2E in mixture with another product, fill the spray tank 1/2 to 3/4 full with clean water and begin agitation. If tankmixing 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 BROMOX 2E and add water to the spray tank to the desired level. If tankmixing with other product types, add the BROMOX 2E first before adding the other

product or compatibility problems may occur. 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 BROMOX 2E The following foliar insecticides are compatible with BROMOX 2E as tank mixtures.

INSECTICIDE COMMON NAME	TRADE NAME	FORMULATION
Diazinon	Various	Emulsifiable Concentrate
Dimethoate	Various	Emulsifiable Concentrate
Trichlorfon	Dylox <sup>2</sup>	Soluble Powder
Carbofuran	Furadan <sup>6</sup>	Flowable
Chlorpyrifos	Lorsban <sup>4</sup>	Emulsifiable Concentrate
Malathion	Various	Emulsifiable Concentrate
Oxydemeton-methyl	Metasystox-R <sup>2</sup>	Sprayable Concentrate
Permethrin	Pounce <sup>6</sup>	Emulsifiable Concentrate
Fenvalerate	Pydrin <sup>5</sup>	Emulsifiable Concentrate
Carbaryl	Sevin <sup>9</sup>	Sprayable wettable powder or
Demeton	Systox <sup>2</sup>	Flowable
	,	Emulsifiable Concentrate

If tank mixing with products other than listed above or 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 BROMOX 2E.

#### SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

BROMOX 2E can be applied in combination with sprayable liquid fertilizer or spray additives such as surfactants or crop oil concentrate.

When tankmixing with liquid fertilizer always add the fertilizer to the spray tank first and agitate thoroughly before adding BROMOX 2E. 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 BROMOX 2E is evenly mixed with the fertilizer. Leaf burn may occur when BROMOX 2E 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 BROMOX 2E. Do not apply fertilizers or spray additives with BROMOX 2E if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to BROMOX 2E. Do not

apply BROMOX 2E in combination with fertilizer or spray additives if restricted under the individual crop use directions.

#### APPLICATION PROCEDURES

BROMOX 2E can be applied to registered use areas by ground, aerial and sprinkler irrigation equipment. The following provides recommended methods of application for each crop.

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

(X) indicates recommended application use

#### 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 minimum spray pressure of 30 40-60 psi at the nozzle tips 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(3) nozzles are not recommended as weed control with BROMOX 2E may be reduced. In general a minimum 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 speed of 10 mph is suggested if field conditions cause excessive boom movement during application and subsequent which results in poor spray coverage. Ground applications made when dry, dusty field conditions exist may provide reduced weed control in wheel track areas. Applications using less than 10 gallons per acre may result in reduced weed control.

When weed infestations are heavy, use of higher spray volumes and spray pressure will be helpful in obtaining uniform weed coverage. When corn or grain sorghum are large enough to interfere with the spray pattern, drop nozzles should be used to obtain uniform weed coverage. If you are unsure of the infestation level or the size of the 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. A minimum spray volume of 3 GPA may be used if crop cancey and word density allow adequate spray coverage at that gallonage.

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

BRCMON 2E can be applied through sprinkler irrigation systems to small grains, field corn, popcorn, and grain sorghum, onions, mint, grasses grown for seed or sod production, garlic, Conservation Reserve Program (CRP) areas and seedling alfalfa.

Apply BROMOX 2E 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  $BROMOX\ 2E$  .
- 9. BROMOX 2E should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of BROMOX 2E 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 BROMOX 2E is diluted in the supply tank, fill the tank with half of the water amount desired, add the BROMOX 2E and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part BROMOX 2E.
- ? 13. Start the sprinklers and then inject BROMOX 2E into the irrigation line. BROMOX 2E 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 BROMOX 2E 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 BROMOX 2E applications may place target weeds under stress, resulting in erratic weed control. Whenever EROMOX 2E 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 BROMOX 2E 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

Annual Sowthistle (Sonchus oleraceus) Black Nightshade (Solanum nigrum) Blue Mustard (Chorispora tenella) Bristly Starbur (Acanthospermum hispidum) Coast Fiddleneck (Amsinckia intermedia) Common Cocklebur (Xanthium strumarium) Common Lambsquarters (Chenopodium album) Common Tarweed (Hemizonia congesta) Cutleaf Nightshade (Solanum triflorum) Eastern Black Nightshade (Solanum ptycanthum) Field Pennycress (Thlaspi arvense) Green Smartweed (Polygonum scabrum) Hairy Nightshade (Solanum sarachoides) Jimsonweed (Datura stramonium) Ladysthumb (Polygonum persicaria) Lanceleaf sage (Salvia reflexa) Pennsylvania Smartweed (Polygonum pensylvanicum) Pepperweed spp. (annual) (Lepidium spp.) Shepherdspurse (Capsella bursa-pastoris) Silverleaf Nightshade (Solanum elaeagnifolium) Tartary Buckwheat (Fagopyrum tatoricum) 'Sunflower (Helianthus annus) Wild Buckwheat (Polygonum convolvulus)

<sup>1</sup>For control of sunflower, delay application until first emerging sunflower seedlings are 4 inches in height.

#### SUSCEPTIBLE BROADLEAF WEED SPECIES

Buffalobur (Solanum rostratum)
Burcucumber (Sicyos angulatus)
Common Groundsel (Senecio vulgaris)
Common ragweed (Ambrosia artemisiifolia)
Corn Chamomile (Anthemis arvensis)
Corn Gromwell (Lithospermum arvense)
Cow Cockle (Saponaria vaccaria)
Giant Ragweed (Ambrosia trifida)
Hemp Sesbania (Sesbania exaltata)
Ivyleaf morningglory (Ipomoea hederacea)
Knawel (Scleranthus annus)
<sup>2</sup>Kochia (Kochia scoparia)
London Rocket (Sisymbrium irio)
Mayweed (Anthemis cotula)

Pitted morningglory\* (Ipomoea lacunosa)
Prostrate Knotweed (Polygonum aviculare)
Puncture Vine (Tribulus terrestris)

Redroot Pigweed (Amaranthus retroflexus)
Russian Thistle (Salsola kali)

Spiny Pigweed (Amaranthus spinosus)
Tall Morningglory (Pomoea purpurea)

Tall Waterhemp (Amaranthus tuberculatus)
Tumble mustard (Sisymbrium altissimum)
Velvetleaf (Abutilon theophrasti)
Venice Mallow (Hibiscus trionum)
Wild Mustard (Sinapis arvensis)
Wild Radish (Raphanus raphanistrum)
Yellow Starthistle (Centaurea solstitialis)

For effective control, these weeds should not exceed the 4 leaf stage or 2 inches in height, whichever comes first.

#### WEED SUPPRESSION

BROMOX 2E suppresses the growth of Canada thistle (Cirsium arvense) by burning down top growth. Regrowth may occur.

#### \*Not currently registered in California.

#### 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), onions, garlic; chemigation in seedling alfalfa, small grains, onions and garlic; 2,4-D and MCPA tank mixtures in small grains; 2,4-D and atrazine tank mixtures in corn and sorghum; 2,4-DB tank mixture 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), and 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 <del>Non Residential Turf,</del> Seed or Sod Production Non-Residential Turfgrass NON-CROPLAND
Noncropland and Industrial Sites

# CEREAL GRAIN CROPS CORN (FIELD AND POP), AND SORGHUM (GRAIN AND FORAGE) AND SUDANGRASS BROMOX 2E RECOMMENDATIONS

	BROMOA ZE RECOMMENDATIONS					
		APPLICATION TIMING AND SPECIFIC COMMENTS				
PRODUCT	RATE	CROP	WEEDS			
BROMOX 2E	Preemerge nce 1-1 1/2 pints/A	Apply to corn or sorghum before planting until just prior to crop emergence.	See CORN AND SORGHUM APPLICATION RATE TABLE - BROMOX 2E for list of weeds and corresponding stages of growth			
	l pint/A	Apply to corn after emergence but prior to tassel emergence.	that are controlled by BROMOX 2E at recommended rates of application. For control of			
		Apply to sorghum and sudangrass between the 3 leaf stage after emergence but prior to the preboot stage (growth stage 4).	additional weeds not listed in the rate table see the GENERAL WEED LIST.			
	1 1/2 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 and prior to preboot stage (growth stage 4).				
	2 pints/A*	Apply to field corn only between the 4 leaf stage but and prior to tassel emergence. WARNING: DO NOT APPLY THE 2 PINTS/A RATE OF BROMOX 2E ALONE OR IN TANK MIXTURES TO SORGHUM.	Use the 2 pints/A rate on corn to control susceptible weeds that are growing under less than optimum conditions and where Bromox 2E + atrazine tank mixtures cannot be used. Apply to MOST SUSCEPTIBLE breadleaf weeds up to the 8 leaf stage or 4 inches in height or 2 inches in diameter, whichever comes first. Apply to SUSCEPTIBLE breadleaf weeds up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.			

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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 a 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 first. Do not use chemigation for control of weeds that exceed 4 inches in height control may because unacceptable.

<sup>\*</sup>This rate is not surrently registered in California.

CORN AND SORGHUM APPLICATION RATE TABLE - BROMOX 2E

WEED SPECIES		<u>1 P</u> :	int/A	<u>1 1/2 to</u>	2 Pints/A'
When determining l leaves except cotyl	eaf stage, count all edonary leaves	Max. Leaf Stage	Max. Weed Height (inches)	Max. Leaf Stage	Max. Weed Height (inches)
Black Nightshade	(Solarum nigrum)	6	6	6	6
Buffalobur	(Solarum rostratum)	4	2	6	4
Burcucumber	(Sicyos angulatus)	-	-	4	4
Common Cocklebur	(Xanthium strumarium)	6	8	8	10
Common Lambsquarters	(Chenspodium album)	-	6	-	8
Common Ragweed	(Ambresia artemisiifolia)	6	4	8	6
Eastern Black Nightshade	(Solarum ptycanthum)	6	6	6	б
Giant Ragweed	(Ambrosia trifida)	6	4	6	6
Hemp Sesbania	. (Sesbania exaltata)	-	-	4	4
Ivyleaf Morningglory	(Ipomoea hederacea)	3	3	4	4
Jimsonweed	(Datura stramonium)	4	4	6	5
Kochia	(Kochia scoparia)	-	-	-	2
Ladysthumb	(Polygonum persicaria)	4	4	6	б
Pennsylvania Smartweed	(Polygonúm persylvanicum)	4	4	6	б
Pitted Morningglory*	(Ipomoea lacunosa)	3	3	4	4
Redroot Pigweed3	(Amaranthus retroflexus)	-	-	4	2
Spiny Pigweed <sup>3</sup>	(Amaranthus spinosus)	<del>-</del> .	-	4	2
Sunflower	(Helianthus annus)	4	6	6	8
Tall Morningglory	(Ipompea purpurea)	3	3	4	4
Tall Waterhemp <sup>3</sup>	(Amaranthus tuberculatus)	-	-	4	2
Velvetleaf	(Abutilon theophrasti)	4	3	6	5
Venice Mallow	(Hibiscus trionum)	_	-	4	2
Wild Buckwheat	(Polygonum ccnvolvulus)	4	6	6	8
Wild Mustard	(Sinapis arvensis)	_	-	4	4

WEEDS SUPPRESSED2			
Canada Thistle	(Cirsium arvense)	Not Recommended	8 inch to bud stage

<sup>1</sup> When determining leaf stage, count all leaves except cotyledonary leaves.

<sup>&</sup>lt;sup>2</sup> BROMOX 2E suppresses the growth by burning down of top growth. Regrowth may occur.

#### BROMOX 2E TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS					
PRODUCT	RATE	CROP	WEEDS				
BROMOX 2E + atrazine	Premergen ce 3/4-1 1/2 pints/A + 1/2-1 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 - BROMOX 2E + ATRAZINE TANK MIXTURES for list of weeds and corresponding stages of growth that are controlled by BROMOX 2E + Atrazine tank mixtures at				
	3/4-1 pint/A + 1/2-1 1/5 lb ai/A	Apply to corn after emergence but before corn is 12 inches tall.'  Apply to sorghum after the 3 leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first.	recommended rates of application. For control of additional weeds not listed in the rate table see the GENERAL WEED LIST.				
	1 1/2 pints/A + 1/2-1 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.					

### 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.

<sup>&</sup>lt;sup>3</sup> Control of pigweeds in the high plains areas of Texas and Oklahoma may not be satisfactory with BROMOX 2E. Repeat applications may be necessary to achieve satisfactory control.

<sup>\*</sup> Do not apply BROMOX 2E at the 2 pints/A rate to sorghum.

<sup>\*</sup>Not currently registered in California.

CORN AND SORGHUM APPLICATION RATE TABLE - BROMOX 2E + ATRAZINE TANK MIXTURES

WEED SPECIES				BROM	OX 2E	AND A	TRAZ	INE R	ATE (	TANK	MIX)		
		3/ Pin: + 1/2	t/A · lb	3/ Pint + 1 1/!	t/A 5 lb	1 Pint + 1/2	lb	1 Pin +	t/A ./5	1 1 Pin + 1/2	t/A - lb	1 1 Pin 4	t/A - 5 lb
When determ	-	ai	/A	ai,	/A	ai,	/A	lb a	i/A	ai,	/A	ai	/A
stage, count except cotyled	all leaves	MAX LEAF STAGE	MAX WEED HGT.	MAX LEAF STAGE	MAX WEED HGT.	MAX LEAF STAGE	MAX WEED HGT.	MAX LEAF STAGE	MAX WEED HGT.	MAX LEAF STAGE	MAX WEED HGT	MAX LEAF STAGE	MAX WEED HGT
Buffalobur Burcucumber Common Cocklebur Common Cocklebur Common Cocklebur Common Lamsquarters Common Ragweed  Eastern Black Nightshade Entireleaf Merningglory Glant Ragweed Hemp Sesbania Typleaf Merningglory Jurschweed Kconia Ladysthumb Marestail Palmleaf Merningglory Pitted Morningglory Pitted Morningglory Pennsylvania Smartweed Pokeweed Prickly Sida Puncturevine Purple Morningglory Redroot Pigweed' Smallflower Morningglory Smooth Pigweed' Sunflower Tall Morningglory	(Solanum nigrum) (Solanum rostratum) (Solanum rostratum) (Sicyos angulatus) (Kanthium srumarium; (Chenopodium album) (Ambrosia artemisiifolia) (Solanum ptycanthum) (Ipomoea hederacea) (Ambrosia trifida) (Sesbania exaltata) (Ipomoea hederacea) (Datura stramonium) (Kochia scoparia) (Polygonum persicaria) (Ipomoea wrightii) (Ipomoea lacunosa) (Ipomoea lacunosa) (Polygonum pensylvanicum) Phytolacca americana) (Sida spinosus) (Iribulus terrestris) (Ipomoea muricata) (Amaranthus retroflexus) (Jacquemontia tammifolia) (Amaranthus spinosus) (Helianthus annus) (Ipomoea purpurea) (Amaranthus (Ipomoea purpurea)	4 4 6 - 6 4 4 3 3 4 4 6 5 3 4 4	4 4 4 8 6 4 4 4 - 6 4 3 4 3 4 2 2 8 3 2	4 4 8 - 6 4 4 5 - 4 6 7 2 5 4 6 8 8 4 8	4 4 4 10 10 6 4 3 8 4 4 2 4 3 3 4 4 2 - 3 6 10 4 6	£ ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	6 4 4 10 10 6 6 1 7 3 4 4 10 4 4 4 10 4 4 4 10 4 4 4 10 4 4 4 10 4 4 4 10 4 4 4 10 4 10 4 4 10 4 10 4 10 4 10 4 10 4 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10	6 6 6 10 - 9 5 4 6 6 6 6 7 8 8 8 10 4 8	6 4 6 12 12 6 6 3 8 4 4 7 8 5 3 4 8 5 3 4 8 5 4 3 4 3 4 4 3 4 5 4 4 5 4 5 4 5 4 5 4	6 6 6 10 - 8 6 4 1 6 - 4 4 8 6 4 6 4 6 10 - 4 4 6 4 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6 4 6 12 12 6 5 3 10 4 8 5 8 3 4 4 3 4 3	6 6 6 6 10 - 8 6 4 4 8 6 6 6 6 2 8 4 8 4 4 8 6 6 6 6 7	6 4 6 12 12 12 6 6 6 3 10 4 4 6 4 8 5 3 4 8 6 2 4 3 4 3 6 4 6 1 2 4 6 6 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Toothed Spurge Velvetleaf Venice Mallow Wild Buckwheat	tuberculatus) (Euphorbia dentata) (Abutilon theophrasti) (Hibiscus trionum) (Polygonum convolvulus) (Sinapis arvensis)	2 4 4 6	2 3 2 8	2 4 4 8	2 3 2 10	4 6 4 8	4 5 2 10 4	4 6 4 10	4 5 2 12 4	4 8 4 10	4 6 2 12	4 8 4 10	4 6 2 12 4
WEEDS SUPPRES	SED <sup>2</sup>												
Canada	(Cirsium arvense)	No Reco	mme	No Recor	mmen	8"-1	bud	8 n - :	bud	8"-	bud	8"-	bud

<sup>1</sup> When determining leaf stage, count all leaves except cotyledonary leaves.

Selected rates of BROMOX 2E + atrazine tank mixtures suppress the growth by burning down of top growth. Regrowth may occur.

<sup>&</sup>lt;sup>3</sup> If pigweeds (Amaranthus sp.) present in the field to be treated have been identified as

triazine resistant biotypes, use BROMOX 2E at 1 1/2 pints/A in a tank mixture with atrazine at 1/2 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 BROMOX 2E + atrazine tank mixtures. Repeat applications may be necessary to achieve satisfactory control.

\* Not currently registered in California.

#### ATRAZINE CONVERSION TABLE1/

ATRAZINE FORMULATION	ATRAZINE RATE POUNDS OF ACTIVE INGREDIENT PER ACRE	ATRAZINE FORMULATION RATE PER ACRE
Atrazine 4L	1/2	1 Pint
j	1 1/5	2 2/5 Pints
Atrazine 80WP	1/2	5/8 Pound
	1 1/5	1 1/2 Pounds
Aatrex®Nine-O12	1/2	3/5 Pound
	1 1/5	1 1/3 Pounds

<sup>&</sup>lt;sup>17</sup>Follow all precautions and limitations on the labels of products used in tank mixture with BROMOX 2E.

#### 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 BROMOX 2E at 1 pint/A. Make a second application of BROMOX 2E 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 BROMOX 2E at 1 1/2 to 2 pints/A or BROMOX 2E + atrazine

tank mixture at 1 pint/A + 1 1/5 lb ai/A. Make a second application of BROMOX 2E at 1 pint/A 7 to 10 days later, but do not exceed a total of  $2 \ni pints/A$  of BROMOX 2E per season on field corn or popcorn.

#### Canada Thistle Management

For effective management of Canada thistle, the following BROMOX 2E treatments should be applied to thistle from 8" to the bud stage for in-season burndown of top growth:

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BROMOX 2E at 1 1/2 to 2 pints/A

BROMOX 2E at 1 - 1 1/2 pints/A + atrazine at 1/2 - 1 1/5 lbs ai/A

BROMOX 2E at 1 - 1 1/2 pints/A + Banvel or Clarity at 1/4 - 1/2 pint/A

BROMOX 2E at 1 - 1 1/2 pints/A + atrazine at 1/2- 1 1/5 lbs ai/A + Banvel or Clarity

at 1/8 - 1/4 pint/A

BROMOX 2E at 1 - 1 1/2 pints/A + 2,4-D at 1/8 - 1/4 lb ai/A

BROMOX 2E at 1 - 1 1/2 pints/A + atrazine at 1/2- 1 1/5 lbs ai/A + 2,4-D at 1/8 - 1/4 lb

ai/A
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If possible follow with cultivation 14-21 days after treatment. In the fall apply 2,4-D (such

as Weedone<sup>9</sup> 638), Banvel<sup>10</sup>, Clarity<sup>10</sup> or Roundup<sup>8</sup> at recommended rates to Canada thistle 4-8 inches tall prior to killing frost. Follow with a similar control program in next year's rotational crop.

\*This rate is not surrently registered in California.

# ADDITIONAL BROMOX 2E TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS				
PRODUCT	RATE	CROP	WEEDS			
BROMOX 2E  +  ¹Banvel¹⁰  /Clarity	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 after the 3 leaf stage but prior to the preboot stage (growth stage 4) or 15 inches in height, whichever comes first. before serghum is 15 inches tall. Do not apply in the boot stage.	All weeds controlled by BROMOX 2E 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 BROMOX 2E.			
		Use drop nozzles if crop is taller than 8 inches.				
	1 1 2 pints/A - 1/8-1/2 pint/A	Apply to field corn between the 4 leaf stage but and 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. and before sorghum is 15 inches tall. Do not apply in the boot stage. Use drop nozzles if crop is taller than 8 inches.				

		APPLICATION TIMING AND SPECIFIC COMMENTS				
PRODUCT	RATE	CROP	WEEDS			
BROMOX 2E  + atrazine + ¹Banvel¹⁰ <del>/Clarity</del>	1 pint/A + 1/2 to 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 after 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 BROMOX 2E + 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 BROMOX 2E.			
	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.				
		<sup>1</sup> Clarity <sup>10</sup> 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 Bromox 2E or Bromox 2E + atrazine on sorghum.			
BROMOX 2E + 2,4-D (such as WEEDONE* and WEEDAR* Brand HERBICIDE )	1 pint/A + 1/16-1/4 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 after emergence but prior to the preboot stage (growth stage 4) or 15 inches in height. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by BROMOX 2E at recommended rates plus improved pigweed and kochia control. For Canada thistle burndown and field bindweed suppression up to the midbloom stage, use 1/8 - 1/4 lb ai/A of 2,4-D with BROMOX 2E.			

		APPLICATION TIMING AND SPECIFIC COMMENTS			
PRODUCT	RATE	CROP	WEEDS		
	1 1/2 pints/A + 1/16-1/4 lb ai/A	Apply to field corn between the 4 leaf stage but and prior to tassel emergence. Use drop nozzles if crop is taller than 8 inches.			
		Apply to sorghum between the 4 leaf stage after emergence but prior to the preboot stage (growth stage 4) or 15 inches in height. Use drop nozzles if crop is taller than 8 inches.			
BROMOX 2E  + atrazine + 2,4-D (such as WEEDONE* and WEEDAR* Brand HERBICIDE )	1 pint/A + 1/2- 1 1/5 1b ai/A + 1/16 - 1/4 1b ai/A	emergence but before the corn is 12 inches tall. Use drop nozzles if crop is taller than 8 inches.	All weeds controlled by BROMOX 2E + 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 BROMOX 2E.		
<b>)</b>	1 1/2 pints/A + 1/2-1 1/5 lb ai/A	Apply to field corn between the 4 leaf stage but and before the corn is 12 inches tall. Use drop nozzles if crop is taller than 8 inches.			
	1/16-1/4 lb ai/A	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. and before sorghum is 12 inches tall. Do not apply in the boot stage. Use drop nozzles if crop is taller than 8 inches.			

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BROMOX 2E + Accent <sup>5</sup> + non-ionic surfactan t	1 pint/A + 2/3 oz/A + 1 qt/100 gal of water (0.25% v/v)	Apply to field corn preemergence or postemergence up to 36 inches tall. Use drop nozzles only when corn is 24 - 36 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by BROMOX 2E at 1 or 1 1/2 pt/A 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 BROMOX 2E
	1 1/2 pint/A + 2/3 oz/A + 1 qt/100 gal of water (0.25% v/v)	Apply to field corn between postemergence after the 4 leaf stage up to 36 inches in height. Use drop nozzles only when corn is 24 - 36 inches tall. It not apply this tank mix to sorghum.	or Accent labels that are least restrictive.
BROMOX 2E + atrazine + Accent <sup>5</sup> + non-ionic surfactan t	1 pint/A + 1/2 - 1 1/5 lb ai/A + 2/3 oz/A + 1 qt/100 gal of water (0.25% v/v)	Apply to field corn preemergence or through postemergence but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by BROMOX 2E + atrazine 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 BROMOX 2E or Accent labels that are least restrictive.
	1 1/2 pint/A + 1/2 - 1 1/5 lb ai/A + 2/3 oz/A + 1 qt/100 gal of water (0.25% v/v)	Apply to field corn between after the 4 leaf stage of corn growth but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	

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BROMOX 2E + Beacon + non-ionic surfactan t	1 pint/A + 0.38-0.76 oz/A <sup>1</sup> (1-2 packets/4 acres) + 1 qt/100 gal 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 BROMOX 2E at 1 pt/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 BROMOX 2E or Beacon labels that are least restrictive.
BROMOX 2E + Exceed <sup>12</sup> + non-ionic surfactan t	3/4 - 1 pint/A + 0.5 - 1.0 oz/A + 1 qt/100 gal 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 Bromox 2E at 3/4 - 1 pint/A will control all weeds on the Bromox 2E label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Exceed at 1.0 ounce/A to Bromox 2E at 3/4 - 1 pint/A will control all weeds on both the Bromox 2E and Exceed labels. Follow the weed size guidelines on the Bromox 2E and Exceed labels that are least restrictive.
BROMOX 2E + Permit <sup>8</sup> + non-ionic surfactan t	3/4 - 1 pint/A + 1/3 - 2/3 oz/A + 1 qt/100 gal of water (0.25% v/v)	Apply to field corn from the 3 leaf stage to laybay. Do not apply this tank mix to sorghum.	Addition of Permit at 1/3 ounce/A to Bromox 2E at 3/4 - 1 pint/A will control all weeds on the Bromox 2E label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Permit at 2/3 ounce/A to Bromox 2E at 3/4 - 1 pint/A will control all weeds on both the Bromox 2E and Permit labels. Follow the weed size guidelines on the Bromox 2E and Permit labels that are least restrictive.
BROMOX 2E + Stinger	1 -1-1/2 pints/A + 1/3-2/3 pint/A	Apply to field corn after emergence up to 24 inches in height. Do not apply this tank mix to sorghum.	All weeds controlled by BROMOX 2E 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.

	1 1/2 pints/A + 1/3 - 2/3 pint/A	Apply to field corn from 4 leaf stage up to 24 inches in height. Do not apply this tank mix to sorghum.	
BROMOX 2E + atrazine + Stinger <sup>4</sup>	1 pint/A + 1/2 - 1 1/5 lb ai/A + 1/3-2/3	Apply to field corn after emergence but before corn is 12 inches tall. Do not apply this tank mix to sorghum.	All weeds controlled by BROMOX 2E + atrazine tank mixtures at recommended rates of application plus improved Canada thistle burndown.  For optimum performance apply
	pint/A  1 1/2 pints/A  + 1/2 - 1 1/5 lb ai/A + 1/3 - 2/3 pint/A	Apply to field corn from 4 leaf stage but before corn is 12 inches tall. Do not apply this tank mix to sorghum.	to Canada thistle at least 4 inches in diameter or height but before bud stage.
^^BROMOX 2E + Pursuit + nonionic surfactan t + UAN fertilize r solution	3/4-1 pint/A + 4 ounces/A + 1 qt/100 gallons + 1-2 quarts/A	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 BROMOX 2E + Pursuit tank mixtures.	This tank mix will control all broadleaf weeds listed as controlled by BROMOX 2E at 3/4-1 pint/A plus giant foxtail, redroot pigweed, and other grass and broadleaf weeds listed on the Pursuit label.

BROMOX 2E + Bladex 80W <sup>5</sup> or Bladex 90DF <sup>5</sup>	1 pint/A + 1 1/2-2 1/2 lb/A <sup>1</sup> or 1 3/10- 2 1/5 lb/A <sup>1</sup>	Apply to field corn between the 3 leaf stage but and 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 apply BROMOX 2E in tank mixture with Bladex or Extrazine under cold, wet	All weeds controlled by BROMOX 2E at 1 1/2 pints/A plus suppression or control of foxtails and other annual grasses that do not exceed 1 1/2 inches in height.
BROMOX 2E + Extrazine II DF <sup>5</sup> or Extrazine 90DF <sup>5</sup>	1 pint/A + 1 3/10-2 1/5 lb/A <sup>1</sup>	weather conditions or to weather, storm, disease or insect-stressed field corn. Do not add adjuvants such as surfactant or crop oils or fertilizer solutions as excessive crop injury may occur. Do not apply to popcorn or corn grown for seed.	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.
BROMOX 2E* + Roundup*	Preemerge nce 1-1 1/2 pints/A + 1/2-3 pints/A	Apply to corn or sorghum before planting time up until just prior to crop emergence.	All weeds controlled by BROMOX 2E 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.

Clarity must be applied before cern exceeds eight inches in height.

\*\*This tank mixture is not currently registered in California.

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

- BROMOX 2E 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 leaf burn.
- Seed corn producers should consult the respective seed corn company regarding tolerance of certain seed production inbred lines to BROMOX 2E.
- Do not apply BROMOX 2E 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 until the following season.
- Do not cut crop for feed, fodder or graze within 30 days of application.
- The total cumulative rate should not exceed 2 3 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 BROMOX 2E + Accent or BROMOX 2E + Beacon tank mixtures may result in a further increase in crop leaf burn.
- Special care should be taken when using BROMOX 2E, and Banvel, Clarity or 2,4-D tank mixtures to avoid off target drift to sensitive crops.

- Tank mixtures with 2,4-D, or Banvel, or Clarity can cause stalk brittleness to field corn or sorghum. 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 BROMOX 2E.
- Do not apply BROMOX 2E 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 BROMOX 2E to sorghum.
- Do not apply the BROMOX 2E + Pursuit tankmix 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)
BROMOX 2E RECOMMENDATIONS

		BROMOX ZE RECOMMENDATIONS		
		APPLICATION TIMING AND SPECIFIC COMMENTS		
PRODUCT	RATE	CROP	WEEDS	
BROMOX 21	1 - 2 -1 1/2 pints/A	Spring seeded wheat, barley, and 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 1 1/2-2 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 BROMOX 2E at 1 1/2-2 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.	
	1 1/2 - 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, and oats, rye and triticale in Idaho, Oregon, Washington, Colorado, Wyoming and Montana. throughout the United States. Apply from emergence up and prior to the boot stage.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE weeds (see GENERAL WEED LIST) up to the 8 leaf stage or 4 2 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.	

Chemigati on Only 2 pints/A	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 INSTRUCTIONS section for complete details.	height or 2 inches in diameter, whichever comes first. Apply
Small Grains underseed ed with Alfalfa  1-1 1/2 pints/A	Apply to small grains (wheat, barley, cats, rye or triticale) underseeded with alfalfa after small grains emergence up to the boot stage and when underseeded alfalfa has a minimum of 4 trifcliate leaves. Follow all precautions and restrictions listed under the small grains and seedling alfalfa sections.	Apply 1 pint/A to MOST SUSCEPTIBLE and 1 1/2 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.

# BROMOX IE TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
PROMOX 2E  +  2,4-D  (such as  WEEDONE*  or	1-2 pints/A + 1/4-1/2 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.
WEEDAR® brand HERBICIDE	3/4-1 pint/A + 1/4-1/2 lb ai/A	Apply to wheat and barley in Minnesota, North and South Dakota from the fully tillered but before the 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.

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E  + MCPA (such as RHONOX® or RHOMENE®)	1-2 pints/A + 1/4-1/2 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.
BROMOX 2E + Banvel <sup>10</sup>	1-1 1/2 pints/A + 1/8-1/4 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.
BROMOX 2E + Glean <sup>5</sup> + nonionic surfactan t	3/4-1 1/2 pints/A + 1/6-1/3 oz/A + 1 qt/100 gal 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.
BROMOX 2E + Ally <sup>5</sup> + nonionic surfactan t	3/4-1 1/2 pints/A + 1/10 oz/A + 1 qt/100 gal of water	Apply to wheat and barley from the 2 leaf stage but before the 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.
BROMOX 2E + Finesse <sup>5</sup> + nonionic surfactan t	3/4-1 1/2 pints/A + 1/6-1/3 oz/A + 1 qt/100 gal of water	Apply to wheat and barley from the 2 leaf stage but before the 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.

			APPLICATION TIMING A	ND SPECIFIC COMMENTS
	PRODUCT	RATE	CROP	WEEDS
	BROMOX 2E + Amber <sup>12</sup> + nonionic surfactan t	3/4-1 1/2 pints/A + 0.28-0.56 oz/A + 0.25-0.5% v/v	Apply to wheat and barley after the 3 leaf stage but before the flag leaf is visible. Refer to the Amber label for crop rotation and other restrictions.	This tank mix improves 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.
	BROMOX 2E + Express <sup>5</sup> + nonionic surfactan t	1-1 1/2 pints/A + 1/6-1/3 oz/A + 1 qt/100 gal 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 and up to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new
		3/4-1 1:2 pints/A + 1/6-1/3 oz/A + 1 qt/101 gal 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.	growth.
)	BROMOX 2E  + Harmony Extra <sup>5</sup> + nonionic surfactan t	3/4-1 1/2 pints/A + 3/10 - 1/2 oz/A + 1 qt/100 gal of water	Winter wheat. Apply after the 2 leaf stage but before the 3rd 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 1st 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 4 leaf stage, 4 inches in height or across whichever comes first.

BROMOX 2E + Curtail <sup>4</sup> or Curtail M <sup>4</sup>	1-1 1/2 pints/A + 2 pints/A	Apply to wheat and barley after the crop begins to tiller up to the 1st 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.
BROMOX 2E  + metribuzi n (Sencor² or Lexone <sup>5</sup> )	1-1 1/4 pints/A + 1/8-1/4 1b 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.
BROMOX 2E + diuron	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 such as henbit and gromwell. Apply to weeds before they are 2 inches tall or 2 inches in diameter.
BROMOX 2E + Tiller <sup>7</sup>	1 pint/A + 1 pint/A	Spring wheat. Apply when crop begins to tiller (3-4 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 BROMOX 2E, this tankmix will control green foxtail from the 2-leaf to 2-tiller stage of growth.

	BROMOX 2E + Hoelon <sup>7</sup>	1 - 2 1 - 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 1-3 leaf stage and broadleaves no larger than 4 leaf stage or rosettes of 1.5 inches in diameter.
		1 - 2 1 1/2 pints/A + 2 2/3- 3 1/3 pints/A	Winter wheat and spring wheat. After emergence but before jointing.	_
<b>+</b>	+ Hoelon <sup>7</sup> crop oil concentra te	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.  DO NOT USE ON BARLEY	
	BROMOX 2E - Avenge <sup>1</sup>	1-2 pints/A + 2 1/2-4	Winter Wheat. Four leaf to tillering stage. Refer to Avenge label for varietal and other restrictions.	This tank mix will provide wild oat control in addition to broadleaves. Apply to wild oats in the 3-5 leaf stage and
)		pints/A	Spring Wheat. Five to 6 leaf stage. Refer to Avenge label for varietal and other restrictions.	broadleaves that do not exceed the 4 leaf stage or rosettes of 1.5 inches in diameter. Avenge use rates per acre are
			Barley. Two to 7 leaf stage.	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 30 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 or 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

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### 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 until the following season.
- . The total cumulative rate should not exceed 2 pints/A per season.

# FORAGE, FIBER AND SPECIALTY CROPS ALFALFA (SEEDLING) BROMOX 2E RECOMMENDATIONS

		APPLICATION TIMING AND SPECIFIC	COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E	1-1 1/2 picts/A	In the states of California, Mashington, Oregon, Idaho, Montana, Nyoming, Colorado, Utal, Nevada, Arizona, New Mexico, and the western halves of North Dakota, South Dakota, Nehraska and Kansas: Apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 4 trifoliates leave. When alfalfa stand is attending and alfalfa seedlings less than in injury may occur to alfalfa seedlings less than in the 1 trifoliate or scaling seedlings less than in the 1 trifoliate or scaling seedlings less than in the 1 trifoliate or scaling stage of greath. If you see when the scale of the scale	Apply 1 pint/A to MOST SUSCEPTIBLE broadleaf weeds and 1 1/2 pints/A for 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. BROMOX 2E will not adequately control over-wintered pennycress, henbit and mustards.
вкомох 2в	Chemigation Only 2 pints/A	Apply to seedling alfalfa with a minimum of 2 trifoliate leaves. Apply through automated sprinkler irrigation systems with a mechanical transfer loading system only. See MIXING LCADING AND HANDLING INSTRUCTIONS Section for complete details. BROMOX 22 applications made when temperatures are expected to exceed 85°F at and 3 days following application can result in unacceptable crop injury.	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.

# BROMOX 2E TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E	1 pint/A + 1 quart/A	Apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 4 trifoliate leaves. When alfalfa stand is uneven and conditions favor leaf burn, unacceptable crop injury may occur to alfalfa in the 2 trifoliate 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, BROMOX 2E applications 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 BROMOX 2E application 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® application can cause unacceptable crop injury.	

BROMOX 2E  + Pursuit  + non-ionic surfactan t	3/4 - 1 pint/A  + 3 - 6 ounces/A + 1 qt/100 gallons	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 trifoliate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa treated prior to the 2nd trifoliate stage of growth. If you are unsure of growth stage conditions, contact your local extension service. Bromox 2E + Pursuit applications made when temperatures are expected to exceed 80° F at and 3 days following application can result	This tank mix will control MOST SUSCEPTIBLE 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; and other grass and broadleaf weeds listed on the Pursuit label. Weeds should be 1 - 3 inches tall for optimum control.
BROMOX 2E  + Pursuit + non-ionic surfactan t	% - 3/4 pint/A + 3 - 6 ounces/A + 1 qt/100 gallons	In all states except 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 trifoliate leaves. When alfalfa stand is uneven and conditions favor leafburn, unacceptable crop injury may occur to alfalfa treated prior to the 2nd trifoliate stage of growth. If you are unsure of growth stage conditions, contact your local extension service. Bromox 2E + Pursuit applications made when temperatures are expected to exceed 70° F at and 3 days following applications can result in unacceptable crop injury.	Bromox 2E at ½ pint/A tank mixed with Pursuit will control common lambsquarters up to 2 inches in height plus weeds listed on the Pursuit label. Bromox 2E at 3/4 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. Applications 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. Refer to the Pursuit label for a list of susceptible weeds at each of the recommended rates.

### RESTRICTIONS AND PRECAUTIONS: Alfalfa (Seedling)

- Crop leaf burn can occur following BROMOX 2E 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 BROMOX 2E should not exceed 2 pints/A per season.
- The use of Eptam<sup>11</sup> preemergence may enhance crop leaf burn from postemergence application of BROMOX 2E and should be considered prior to using BROMOX 2E.
- Follow all restrictions and precautions on the tank mixture product label when a BROMOX 2E tank mixture is used.
- Tank mixture with 2,4-DB may result in unacceptable crop leaf burn especially under warm, humid weather conditions.
- BROMOX 2E 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 GRAINS SECTION.
- . Rainfall or overhead irrigation within 7-10 days following BUTYRAC®200 application can cause unacceptable crop injury.

# FLAX (Linium usitatissium only) BROMOX 2E RECOMMENDATIONS

			APPLICATION TIMING A	ND SPECIFIC COMMENTS
	PRODUCT .	RATE	CROP	WEEDS
)	BROMOX 2E	1 pint/A	Apply to flax that is 2 to 8 inches in height. Do not apply BROMOX 2E to flax during or after the bud stage.	that do not exceed the 4 leaf

#### BROMOX 2E TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING A	AND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E + Poast + Crop oil Concentra te or Dash®	1 pint/A + 1-1 1/2 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.	,

## RESTRICTIONS AND PRECAUTIONS: Flax (Linium usitatissium 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 BROMOX 2E application to flax grown on high organic, peat type soils.
- Application under high humidity conditions can injure flax.
- Unless otherwise instructed, do not apply BROMOX 2E with crop oil concentrate, surfactants or nitrogen solutions.
- Do not use on ornamental flax.

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Follow all precautions, directions and restrictions on the Poast® label when using this tank mixture with BROMOX 2E.

#### \*This tank mixture is not currently registered in California.

# GARLIC BROMOX 2E RECOMMENDATIONS

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

## PRECAUTIONS AND RESTRICTIONS: Garlic

• Use a minimum of 20 gallons per acre for ground application.

- BROMOX 2E 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 BROMOX 2E RECOMMENDATIONS

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E	1 -1 1/2 pints/A	Apply to dormant or actively growing established peppermint or spearmint crops that exhibit good vigor.	Apply to MOST SUSCEPTIBLE and SUSCEPTIBLE weeds that do not exceed the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.
	Chemi- gation 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.	

### 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 BROMOX 2E 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 BROMOX 2E to mint should not be made within two weeks of a Sinbar<sup>5</sup> application or unacceptable crop injury may result.
- Do not use in spring or on newly established mint. Fall applications to spring planted mint should be acceptable if the crop is well established.
- BROMOX 2E 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 BROMOX 2E in combination with other products may increase temporary stunting and discoloration.
- Do not harvest within 70 days following treatment.
- Do not apply more than 6.0 pints of Bromox 2E total product per acre to mint in a single growing season.

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ONIONS
BROMOX 2E RECOMMENDATIONS

	•	APPLICATION TIMING A	ND SPECIFIC COMMENTS
PRODUCT	RATE	CROP	WEEDS
BROMOX 2E	Pre- emergence 1-1 1/2 pints/A	Preemergence use restricted to onions 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.	1
	Postemerg ence 1-1 1/2 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 - CONCENTRATED SPRAYS KILL ONIONS. Thorough and uniform coverage is necessary for good weed control.	
		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.	

# RESTRICTIONS AND PRECAUTIONS: Onions

• The sensitivity of onions to BROMOX 2E varies with the variety and environmental

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conditions. Therefore, even if all the label directions are followed, BROMOX 2E application still may cause injury to onions under certain circumstances.

- Ic not irrigate onions that have received a preemergence application of BROMOX 2E for 2 days following application or within 3 days of crop emergence.
- Do not use BROMOX 2E preemergence to onions grown West of the Mississippi River.
- Do not use BROMOX 2E on onions grown under low light intensity, in areas such as Oregon, west of the Cascades.
- Ic not treat onions damaged by sand, insects, or diseases.
- Do not apply postemergence applications of Bromox 2E to onions with aerial equipment.
- Ic not add surfactant.

# GRASS CROPS CONSERVATION RESERVE PROGRAM (CRP) AREAS BROMOX 2E RECOMMENDATIONS

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
FFICUCT	RATE	CROP	WEEDS
BROMOX 2E	1-2 pints/A	_	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.
	Chemi- gation 2 pints/A only	Apply to grasses after emergence. If alfalfa is planted apply after the 4 trifoliate 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.	

#### BROMOX 2E TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING A	ND SPECIFIC COMMENTS
FRODUCT	RATE	CROP	WEEDS
=ROMOX 2E - - Phomene or Rhonox MCPA)	1-2 pints/A + 1/4 - 1/2 pint/A	Apply to CRP areas after grasses have reached the 3 leaf stage. Do not use this tank mixture in areas where alfalfa or other legumes have been planted.	This tank mix improves control of mustards, pigweed, and kochia. Apply up to the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

#### PESTRICTIONS AND PRECAUTIONS: CRP AREAS

• Do not allow livestock to graze in treated areas or feed treated grass and forage to

livestock.

- Do not add spray adjuvants or fluid fertilizers when applying BROMOX 2E to CRP areas planted with alfalfa or other legumes.
- Do not apply BROMOX 2E 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 plants, severe crop injury may occur at any application temperature.
- Do not apply more than 1 1/2 pints/A of BROMOX 2E to CRP areas acres that are underseeded with alfalfa.

# GRASSES GROWN FOR SEED OR SOD PRODUCTION BROMOX 2E RECOMMENDATIONS Seedling and Established Grasses

	RATE	RATE	APPLICATION TIMING A	ND SPECIFIC COMMENTS
Product	Per ACRE	Per 1000 SQ.FT	CROP	WEEDS
BROMOX 2E	1 to 2 pints	0.375 0.6 to 0.75 fl. oz.	seeded grasses for seed or sod production before the boot stage. Established grasses tolerant to BROMOX IS include bentgrasses, Rentucky Bluegrass, Fescues, Ryegrass,	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

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

- Do not allow livestock to graze in treated areas or feed treated grasses to livestock.
- . Do not apply BROMOX 2E to grasses grown for seed or sod production with backpack or handheld application equipment.

# NON-RESIDENTIAL TURFGRASS BROMOX 2E RECOMMENDATIONS Seedling and Established Non-Residential Turfgrass

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	RATE	RATE	APPLICATION TIMING A	ND SPECIFIC COMMENTS
Product	Per ACRE	Per 1000 SQ.FT	CROP ;	WEEDS
BROMOX 2E	1 to 2 pints	.0375 0.6 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 BROMOX 2E include bentgrasses, Kentucky Bluegrass, Fescues, Ryegrass, Bermudagrass and Zoysiagrass. BROMOX 2E may also be used on seedling grasses such as Merion, Park, Delta, or common Kentucky Bluegrasses, Pennlawn, Chewings, Illahee or Alta Fescues, Orchardgrass, Highland, Seaside or Astoria Bentgrasses, Bahiagrass and Zoysiagrass.	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

RESTRICTIONS AND PRECAUTIONS: Non-residential turfgrasses

- Do not allow livestock to graze <del>or feed</del> in treated areas or feed treated grasses to livestock.
- Do not apply BROMOX 2E to non-residential turf with backpack or hand-held application equipment.

# NON-RESIDENTIAL TURFGRASS BROMOX 2E TANK MIXTURE RECOMMENDATIONS Seedling and Established Non-Residential Turfgrass

	RATE	RATE APPLICATION TIMING AND SPECIFIC COMMENTS		
Product	Per ACRE	Per 1000 SQ.FT	CROP	WEEDS
BROMOX 2E + Weedone DPC Ester	Pints  + 3 to 4 Pints	0.75 fl. oz. + 1.125 to 1.5 fl. oz.	Apply to established non-residential turfgrass only. This treatment may cause injury to bentgrasses, St. Augustinegrass, centipedegrass, and carpetgrass.	listed in the GENERAL WEED LIST for BROMOX 2E plus the

		RATE	RATE	APPLICATION TIMING	AND SPECIFIC COMMENTS
	Product	<b>g</b> er ACRE	Per 1000 SQ.FT	CROP	WEEDS
	BROMOX 2E + 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 weed species previously listed in the GENERAL WEED LIST for BROMOX 2E plus the following species:  Red Clover (Trifolium pratense) White Clover (Trifolim repens) Common Chickweed (Stellaria media) Mouseear Chickweed (Cerastium vulgatum) Ground Ivy (Glechoma hederacea) Stitchwort (Stellaria gramminea) Ktotweed (Polygonum aviculare) Prostrate Spurge (Euphorbia supina)  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).
)	BROMOX 2E + Dicamba	2 Pints + 0.125 to 0.25 lb ai	0.75 fl. oz. + 0.006 to 0.012	Apply to established non-residential turfgrass only. This treatment may cause injury to bentgrasses, St. Augustinegrass, centipedegrass, and carpetgrass.	All weed species previously listed in the GENERAL WEED LIST for BROMOX 2E plus the following species:  Red Clover (Trifolium pratense) White Clover (Trifolium repens)
			lb ai		Common Chickweed (Stellaria media) Mouseear Chickweed (Cerastium vulgatum) Pepperweed (Lepidium spp.) Knotweed (Polygonum aviculare)  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).

	RATE	RATE	APPLICATION TIMING	AND SPECIFIC COMMENTS
Product	Rer ACRE	Per 1000 SQ.FT	CROP	WEEDS
BROMOX 2E + MCPP + Dicamba	2 Pints + 0.5 to 1.0 lb ai + 0.125 to 0.25 lb ai	0.75 fl. oz. + 0.012 5 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 centipedegrass.	All weed species previously listed in the GENERAL WEED LIST for BROMOX 2E and BROMOX 2E/Dicamba tank mixtures plus the following species:  Dandelion (Taraxacum officinale) Plantains (Plantago spp.)  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).
BROMOX 2E 4 MCPP - 2,4-D	2 Pints + 0.5 to 1.0 lb ai + 0.5 to 1.0 lb ai	0.75 fl. oz. + 0.012 5 to 0.025 lb ai + 0.012 5 to 0.025 lb ai	Apply to established non-residential turfgrass only. This treatment is not recommended for use on St. Augustinegrass or centipedegrass.	All weed species previously listed in the GENERAL WEED LIST for BROMOX 2E and BROMOX 2E/2,4-D tankmixtures plus the following species:  Dandelion (Taraxacum officinale) Plantains (Plantago spp.) Red Sorrel (Rumex acetosella) Knotweed (Polygonum aviculare)  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 sorrell will require the high use rate of 2,4-D or MCPP.

RESTRICTIONS AND PRECAUTIONS: Tank Mixture Recommendations Non-residential turfgrasses

- BROMOX 2E/WEEDONE DPC tankmixes are not allowed in California.
- Do not allow livestock to graze in treated areas or feed treated grasses to livestock.
- Do not apply BROMOX 2E to non-residential turf with backpack or hand-held application equipment.

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# NON-CROPLAND NON-CROPLAND AND INDUSTRIAL SITES BROMOX 2E RECOMMENDATIONS

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
Produc t	Per ACRE	Per 1000 SQ.FT	CROP	WEEDS
BROMOX 2E	1 to 2 Pints	0.375 6/10 to 0.75 fl. oz.	Apply to non-cropland and industrial sites when weeds have emerged and are actively growing.	1

RESTRICTIONS AND PRECAUTIONS: Non-Cropland and Industrial Sites

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- 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 BROMOX 2E to non-cropland and industrial sites with backpack or hand-held application equipment.

# LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purpose set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness of toxicity to laboratory animals and to plants, and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES EXPRESS OR IMPLIED AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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