UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

December 19, 2022

Matthew Graneto
Senior Regulatory Manager
Bayer CropScience
800 N. Lindbergh Blvd.
St. Louis, MO 63167

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Interim Decision for Bromoxynil and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of Bromoxynil on Pacific Salmonids
Product Name: BUCTRIL HERBICIDE
EPA Registration Number: 264-437
Application Dates: 4/17/2020 and 8/26/2021
Decision Numbers: 561924 and 578090

Dear Matthew Graneto:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Bromoxynil Interim Decision. The Agency has concluded that your submission is acceptable.

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of Bromoxynil on Pacific salmonids. The Agency has concluded that your submission is also acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling

before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

Sincerely,

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

Enclosure

BROMOXYNIL	GROUP 6	HERBICIDE

BUCTRIL® HERBICIDE

FOR THE CONTROL OF CERTAIN BROADLEAF WEEDS IN CORN (FIELD AND POP), SORGHUM (GRAIN AND FORAGE), WHEAT, BARLEY, OATS, RYE AND TRITICALE, SEEDLING ALFALFA, FLAX, GARLIC, ONIONS (DRY BULB), MINT, GRASSES GROWN FOR SEED AND SOD PRODUCTION, CONSERVATION RESERVE PROGRAM (CRP) AREAS, NON-RESIDENTIAL TURFGRASS, AND NON-CROPLAND/INDUSTRIAL SITES.

ACTIVE INGREDIENT: Octanoic acid ester of bromoxynil* (3, 5-dibromo-4-hydroxybenzonitrile). **33.4%**
INERT INGREDIENTS:.....**66.6%**
Contains xylene range/petroleum distillates.

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

E.P.A. Reg. No. 264-437 **E.P.A. Est. No. 264-MO-01**

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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-888-BAYER (1-888-283-6847)

FIRST AID

IF SWALLOWED:	• Immediately call a poison control center or doctor for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
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. • Call a poison control center or doctor for treatment advice.
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.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: This product may pose an aspiration pneumonia hazard. Contains petroleum distillate.

ACCEPTED
Dec 19, 2022
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-437

PRECAUTIONARY STATEMENTS

WARNING

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Do not get in eyes or on skin or clothing. Wear protective eyewear. Harmful if swallowed, or inhaled. Avoid breathing mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of barrier laminate or viton gloves, a chemical resistant apron when cleaning equipment, protective eyewear such as goggles, face shield, or safety glasses, chemical resistant headgear for overhead exposure, and 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

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 to fallow land is prohibited within 300 feet of residential areas (e.g., homes, schools, playgrounds, hospitals, shopping areas, etc.).

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. User should remove clothing/PPE 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 cleaning equipment or disposing of washwaters.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Reporting Ecological Incidents

To report ecological incidents, including mortality, injury, or harm to plants and animals, call [1-866-99BAYER (1-866-992-2937)].

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.

Do not apply with backpack or hand-held application equipment.
Apply to non-residential turf only. Do not apply to residential, playground, or schoolyard turf. Do not apply this product to golf course turf.

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. EP, C01-0132C, (W.D.WA). For further information, please refer to http://www.epa.gov/espp/listatus/wtc/index.htm.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry 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 crops during the restricted entry interval (REI). Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for onion, corn, alfalfa, grass, mint and garlic. For all crops except turf, the REI is 24 hours. The REI for harvesting sod farm turf is 12 days. The REI for other turf activities is 24 hours. For uses on turf grown for transplanting (e.g. on sod farms), notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

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 made of barrier laminate or viton gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to the use of this product on non-residential turfgrass and non-cropland and industrial sites that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until sprays have dried.

USE INFORMATION

BUCTRIL® is formulated as an emulsifiable concentrate of octanoic acid ester of bromoxynil containing the equivalent of 2 pounds of bromoxynil per gallon.

BUCTRIL is a selective postemergence herbicide for control of important broadleaf weeds infesting corn (field and pop), sorghum (grain and forage), wheat, barley, oats, rye, triticale, alfalfa (seedling), flax, onions (dry bulb), garlic, mint (established peppermint and spearmint), Conservation Reserve Program (CRP) areas, grasses grown for seed or sod production, non-residential turfgrass, and non-cropland and industrial sites. Optimum weed control is obtained when BUCTRIL is applied to actively growing weed seedlings. BUCTRIL is primarily a contact herbicide; therefore, thorough coverage of the weed seedlings is essential for optimum control.

BUCTRIL 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 BUCTRIL 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.

WEED RESISTANCE-MANAGEMENT

For resistance management, please note that Buctril Herbicide contains a Group 6 herbicide. Any weed population may contain plants naturally resistant to Group 6 herbicide. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Buctril Herbicide or other Group 6 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

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

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

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

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

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

- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). You can also contact your pesticide distributor or university extension specialist to report resistance.

MIXING, LOADING AND HANDLING INSTRUCTIONS

2.5 Gallon Containers

Special care must 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 Bayer CropScience'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.

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

TANK MIXTURES: BUCTRIL can be tank-mixed with other pesticide products provided that these other products are registered for use on the crop/use site to be treated. The tank mix must be used in accordance with the more restrictive pesticide label limitations and precautions. No label dosage rates may be exceeded. BUCTRIL cannot be mixed with any product containing a label prohibition against such mixing. To apply BUCTRIL in mixture with another product, fill the spray tank 1/2 to 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 specified amount of BUCTRIL and add water to the spray tank to the desired level. If tank mixing with other product types, add the BUCTRIL 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 OTHER PESTICIDES WITH BUCTRIL

The following pesticides are compatible with BUCTRIL Herbicide as tank mixtures.

INSECTICIDE COMMON NAME	TRADE NAME	FORMULATION
Acephate	Orthene®	Soluble Powder
Amitraz	Ovasyn®	Emulsifiable Concentrate
Azinphos-methyl	Guthion®	Liquid
Carbaryl	Sevin®	Sprayable wettable powder or Flowable
Carbofuran	Furadan®	Flowable
Chlorpyrifos	Lorsban®	Emulsifiable Concentrate
Cyfluthrin	Baythroid®	Emulsifiable Concentrate
Deltamethrin	Decis®	Emulsifiable Concentrate
Diazinon	Various	Emulsifiable Concentrate
Dicrotophos	Bidrin®	Emulsifiable Concentrate
Dimethoate	Various	Emulsifiable Concentrate
Esfenvalerate	Asana XL®	Emulsifiable Concentrate
Fenvalerate	Pydrin®	Emulsifiable Concentrate
Imidacloprid	Provado®	Flowable
Lambda-Cyhalothrin	Karate®	Emulsifiable Concentrate
Malathion	Various	Emulsifiable Concentrate
Methomyl	Lannate®	Liquid
Methyl Parathion	Methyl Parathion®	Emulsifiable Concentrate
Methyl Parathion	Penncap-M®	Flowable
Oxamyl	Vydate®	Liquid
Oxydemeton-methyl	Metasystox-R®	Sprayable Concentrate
Permethrin	Pounce®	Emulsifiable Concentrate
Thiodicarb	Larvin®	Flowable
Trichlorfon	Dylox®	Soluble Powder
Zeta-Cypermethrin	Fury®	Emulsifiable Concentrate

HERBICIDE COMMON NAME	TRADE NAME	FORMULATION
MSMA*	MSMA®	
Prometryn	Caparol®	Liquid
Pyrithiobac-Sodium	Staple®	Soluble Powder

* Note that MSMA cannot be used after December 2013

PLANT GROWTH REGULATORS COMMON NAME	TRADE NAME	FORMULATION
Mepiquat Chloride	Pix®	Liquid Concentrate
Mepiquat Chloride	MEP®	Liquid Concentrate
Mepiquat Chloride + Bacillus cereus	Mep Plus®	Liquid Concentrate

If tank mixing with products other than those 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 BUCTRIL.

SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES

BUCTRIL 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 BUCTRIL. 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 BUCTRIL is evenly mixed with the fertilizer. Leaf burn may occur when BUCTRIL 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 BUCTRIL. Do not apply fertilizers or spray additives with BUCTRIL if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to BUCTRIL. Do not apply BUCTRIL in combination with fertilizers or spray additives if restricted under the individual crop use directions.

APPLICATION PROCEDURES

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

	TYPE OF APPLICATION EQUIPMENT		
CROP	**GROUND**	**AERIAL**	**SPRINKLER IRRIGATION**
Corn, (field and pop)	X	X	X
Sorghum (grain and forage), and Sudangrass	X	X	X
Wheat, Barley, Oats, Rye, and Triticale	X	X	X
Alfalfa (seedling)	X	X	X
Flax	X	X	-
Garlic	X	X	X
Mint	X	-	X
Onions (dry bulb)	X	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	-

(X) indicates registered application use

* Preemergence only

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 BUCTRIL 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 are large enough to interfere with the spray pattern, drop nozzles should be used to obtain uniform weed coverage. If you are unsure of the infestation level or size of crop, consult your local extension service.

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.

SPRINKLER IRRIGATION APPLICATION

BUCTRIL Herbicide can be applied through sprinkler irrigation systems to wheat, barley, oats, rye and triticale, field corn, popcorn, and grain sorghum, mint, grasses grown for seed or sod production, garlic, onions (dry bulb) and seedling alfalfa.

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

SPRAY DRIFT MANAGEMENT

Mandatory Spray Drift Management

Aerial Applications

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greaterapplication height is necessary for pilot safety.
- Applicators are required to use a fine or coarser droplet size (ASABE S641).
- Do not apply when wind speeds exceed 10 mph at the application site.
- The boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% orless of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply during temperature inversions.

Ground Boom Applications

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

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

Importance Of Droplet Size

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

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

Boom Height - Ground Boom

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

Release Height - Aircraft

Higher release heights increase the potential for spray drift.

Shielded Sprayers

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

Temperature And Humidity

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

Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a

concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Wind

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

WEED LIST

Postemergence application of BUCTRIL Herbicide will control the following weeds when sprayed in the seedling stage. Maximum weed stage of growth is listed under 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)*
[1]Sunflower	*(Helianthus annuus)*
Wild Buckwheat	*(Polygonum convolvulus)*

[1]For control of sunflower, delay application until first emerging sunflower seedlings are 4 inches in height.

*** Not registered for use in California.**

SUSCEPTIBLE BROADLEAF WEED SPECIES

Buffalobur	*(Solanum rostratum)*
Burcucumber	(*Sicyos angulatus)*
Cluster Flower	*(Flaveria trinervia)*
Common Groundsel	*(Senecio vulgaris)*
Common ragweed	*(Ambrosia artemisiifolia)*
Corn Chamomile	*(Anthemis arvensis)*
Corn Gromwell	*(Lithospermum arvense)*
Cow Cockle	*(Saponaria vaccaria)*
Devils claw	*(Proboscidea louisianica)*
Giant Ragweed	*(Ambrosia trifida)*
Hemp Sesbania	*(Sesbania exaltata)*
Hophornbean Copperleaf	*(Acalypha ostryaefolia)*
Ivyleaf morningglory	*(Ipomoea hederacea)*
Knawel	*(Scleranthus annus)*
[2]Kochia	*(Kochia scoparia)*
London Rocket	*(Sisymbrium irio)*
Mayweed	*(Anthemis cotula)*
Pitted morningglory	(*Ipomoea lacunosa)*
Prairie sunflower	*(Helianthus petiolaris)*
Prostrate Knotweed	*(Polygonum aviculare)*
Puncture Vine	*(Tribulus terrestris)*
[2]Redroot Pigweed	*(Amaranthus retroflexus)*
Russian thistle	*(Salsola kali)*
[2]Spiny Pigweed	*(Amaranthus spinosus)*
Tall Morningglory	*(Ipomoea purpurea)*
[2]Tall Waterhemp	*(Amaranthus tuberculatus)*
Tumble mustard	*(Sisymbrium altissimum)*
Velvetleaf	*(Abutilon theophrasti)*
Venice Mallow	*(Hibiscus trionum)*
Wild Mustard	*(Sinapis arvensis)*
Wild Radish	*(Raphanus raphanistrum)*
Woolly Croton	*(Croton capitatus)*
Yellow Starthistle	*(Centaurea solstitialis)*

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

WEED SUPPRESSION

BUCTRIL suppresses the growth of Canada thistle (*Cirsium arvense*) by burning down top growth. Regrowth may occur.

CALIFORNIA REGISTRATIONS

Only the following directions 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; 2,4-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 DIRECTIONS

CEREAL GRAIN CROPS

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

FORAGE, FIBER AND SPECIALTY CROPS

Alfalfa (Seedling)

Flax
Garlic
Mint (Established Peppermint and Spearmint)
Onions (dry bulb)

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

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	Preemergence 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 - BUCTRIL for list of weeds and corresponding stages of growth that are controlled by BUCTRIL at specified rates of application. For control of additional weeds not listed in the rate table see the 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).	
	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 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. WARNING: DO NOT APPLY THE 2 PINTS/A RATE OF BUCTRIL 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 BUCTRIL + atrazine 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 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 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 - BUCTRIL

WEED SPECIES[1] When determining leaf stage, count all leaves except cotyledonary leaves		1 Pint/A		1 1/2 to 2 Pints/A[4]	
		Max. Leaf Stage	Max. Weed Height (inches)	Max. Leaf Stage	Max. Weed Height (inches)
Black Nightshade	*(Solanum nigrum)*	6	6	6	6
Buffalobur	*(Solanum rostratum)*	4	2	6	4
Burcucumber	*(Sicyos* angulatus)	-	-	4	4
Common Cocklebur	*(Xanthium strumarium)*	6	8	8	10
Common Lambsquarters	*(Chenopodium album)*	-	6	-	8
Common Ragweed	*(Ambrosia artemisiifolia)*	6	4	8	6
Eastern Black Nightshade	*(Solanum ptycanthum)*	6	6	6	6
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	6
Kochia	*(Kochia scoparia)*	-	-	-	2
Ladysthumb	*(Polygonum persicaria)*	4	4	6	6
Pennsylvania Smartweed	*(Polygonum pensylvanicum)*	4	4	6	6
Pitted Morningglory *	*(Ipomoea lacunosa)*	3	3	4	4
Redroot Pigweed[3]	*(Amaranthus retroflexus)*	-	-	4	2
Spiny Pigweed[3]	*(Amaranthus spinosus)*	-	-	4	2
Sunflower	*(Helianthus annus)*	4	6	6	8
Tall Morningglory	*(Ipomoea purpurea)*	3	3	4	4
Tall Waterhemp[3]	*(Amaranthus tuberculatus)*	-	-	4	2
Velvetleaf	*(Abutilon theophrasti)*	4	3	6	5
Venice Mallow	*(Hibiscus trionum)*	-	-	4	2
Wild Buckwheat	*(Polygonum convolvulus)*	4	6	6	8
Wild Mustard	*(Sinapis arvensis)*	-	-	4	4
WEEDS SUPPRESSED[2]					
Canada Thistle	*(Cirsium arvense)*	Not Recommended		8 inch to bud stage	

1. When determining leaf stage, count all leaves except cotyledonary leaves.
2. BUCTRIL 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 BUCTRIL Herbicide. Repeat applications may be necessary to achieve satisfactory control.
4. 4. Do not apply BUCTRIL at the 2 pints/A rate to sorghum

*** Not registered for use in California.**

BUCTRIL TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + atrazine	Preemergence 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 - BUCTRIL + ATRAZINE TANK MIXTURES for list of weeds and corresponding stages of growth that are controlled by BUCTRIL+ Atrazine tank mixtures at specified rates of application. For control of additional weeds not listed in the rate table, see the WEED LIST.
	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 between the 3-leaf stage but prior to the preboot stage (growth stage 4) or 12 inches in height, whichever comes first.	
	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.

CORN (FIELD AND POP) AND SORGHUM (GRAIN AND FORAGE) (continued)

CORN AND SORGHUM APPLICATION RATE TABLE - BUCTRIL + ATRAZINE TANK MIXTURES

WEED SPECIES[1]		BUCTRIL AND ATRAZINE RATE (TANK MIX)											
When determining leaf stage, count all leaves except cotyledonary leaves		3/4 Pint/A + 1/2 lb ai/A		3/4 Pint/A + 1 1/5 lb ai/A		1 Pint/A + 1/2 lb ai/A		1 Pint/A + 1 1/5 lb ai/A		1 1/2 Pint/A + 1/2 lb ai/A		1 1/2 Pint/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 Nightshade	(*Solanum nigrum)*	4	4	4	4	6	6	6	6	6	6	6	6
Buffalobur	(*Solanum rostratum)*	4	4	4	4	6	4	6	4	6	4	6	4
Burcucumber	(*Sicyos angulatus)*	4	4	4	4	4	4	6	6	6	6	6	6
Common Cocklebur	(*Xanthium strumarium)*	6	8	8	10	8	10	10	12	10	12	10	12
Common Lambsquarters	(*Chenopodium album)*	-	6	-	10	-	10	-	12	-	12	-	12
Common Ragweed	(*Ambrosia artemisiifolia)*	6	4	8	6	8	6	8	6	8	6	8	6
Eastern Black Nightshade	(*Solanum ptycanthum)*	4	4	4	4	6	6	6	6	6	6	6	6
Entireleaf Morningglory	*(Ipomoea hederacea)*	-	-	4	3	4	3	4	3	4	3	4	3
Giant Ragweed	(*Ambrosia trifida)*	4	6	6	8	6	8	6	8	8	10	8	10
Hemp Sesbania	(*Sesbania exaltata)*	4	4	4	4	4	4	4	4	4	4	4	4
Ivyleaf Morningglory	(*Ipomoea hederacea)*	3	3	4	4	4	4	4	4	4	4	4	4
Jimsonweed	(*Datura stramonium)*	4	4	4	4	6	6	6	6	6	6	6	6
Kochia	*(Kochia scoparia)*	-	2	-	2	-	2	-	2	-	4	-	4
Ladysthumb	(*Polygonum persicaria)*	4	4	4	4	6	6	8	8	8	8	8	8
Marestail *	*(Conyza canadensis)*	-	-	-	3	-	5	-	5	-	5	-	5
Palmleaf Morningglory	*(Ipomoea wrightii)*	-	-	4	3	4	3	4	3	4	3	4	3
Pennsylvania Smartweed	(*Polygonum strumarium)*	4	4	4	4	6	6	8	8	8	8	8	8
Pitted Morningglory *	(*Ipomoea lacunosa)*	3	3	4	4	4	4	4	4	4	4	4	4
Pokeweed *	*(Phytolacca americana)*	-	-	4	4	6	6	6	6	6	6	6	6
Prickly Sida	*(Sida Spinosus)*	-	-	6	2	4	1	6	2	4	1	6	2
Puncturevine	(*Tribulus terrestris)*	-	-	-	-	-	-	6	4	6	4	6	4
Purple Morningglory	*(Ipomoea muricata)*	-	-	2	3	2	3	2	3	2	3	2	3
Redroot Pigweed[3]	(*Amaranthus retroflexus)*	4	2	8	6	6	4	8	6	6	4	8	6
Smallflower Morningglory	*(Jacquemontia tamnifolia)*	-	-	4	3	4	3	4	3	4	3	4	3
Smooth Pigweed[3]	(*Amaranthus hybridus)*	4	2	6	4	4	2	6	4	6	4	6	4
Spiny Pigweed[3]	(*Amaranthus spinosus)*	4	2	8	6	6	4	8	6	6	4	8	6
Sunflower	(*Helianthus annus)*	6	8	8	10	8	10	10	12	10	12	10	12
Tall Morningglory	(*Ipomoea purpurea)*	3	3	4	4	4	4	4	4	4	4	4	4
Tall Waterhemp[3]	(*Amaranthus tuberculatus)*	4	2	8	6	6	4	8	6	6	4	8	6
Toothed Spurge	*(Euphorbia dentata)*	2	2	2	2	4	4	4	4	4	4	4	4
Velvetleaf	(*Abutilon theophrasti)*	4	3	4	3	6	5	6	5	8	6	8	6
Venice Mallow	(*Hibiscus trionum)*	4	2	4	2	4	2	4	2	4	2	4	2
Wild Buckwheat	(*Polygonum convolvulus)*	6	8	8	10	8	10	10	12	10	12	10	12
Wild Mustard	(*Sinapis arvensis)*	4	4	4	4	4	4	4	4	4	4	4	4
WEEDS SUPPRESSED[2]													
Canada thistle	*(Cirsium arvense)*	Not Recommended		Not Recommended		8"-bud		8"-bud		8"-bud		8"-bud	

1 When determining leaf stage, count all leaves except cotyledonary leaves.

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

3 If pigweeds (*Amaranthus sp.*) present in the field to be treated have been identified as triazine resistant biotypes, use BUCTRIL 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 BUCTRIL + atrazine tank mixtures. Repeat applications may be necessary to achieve satisfactory control, but do not exceed maximum application rates.

* **Not registered for use in California.**

ATRAZINE CONVERSION TABLE[1/]

ATRAZINE FORMULATION	ATRAZINE RATE POUNDS OF ACTIVE INGREDIENT PER ACRE	ATRAZINE FORMULATION RATE PER ACRE
Atrazine 4L	1/2	1 Pint
	1 1/5	2 2/5 Pints
Atrazine 70WP	1/2	5/8 Pound
	1 1/5	1 1/2 Pounds
Aatrex® Nine-O	1/2	3/5 Pound
	1 1/5	1 1/3 Pounds

[1/]Follow all precautions and limitations on the labels of products used in tank mixture with BUCTRIL.

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 BUCTRIL at 1 pint/A. Make a second application of BUCTRIL 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 BUCTRIL at 1 1/2 - 2 pints/A or BUCTRIL + atrazine tank mixture at 1 pint/A + 1 1/5 lb ai/A. Make a second application of BUCTRIL at 1 pint/A 7 to 10 days later, but do not exceed a total of 2 pints/A of BUCTRIL per season on corn (field and pop).

Canada Thistle Management

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

BUCTRIL at 1 1/2-2 pints/A
BUCTRIL at 1 - 1 1/2 pints/A + atrazine at 1/2 - 1 1/5 lbs ai/A
BUCTRIL at 1 - 1 1/2 pints/A + Banvel® or Clarity® at 1/4 - 1/2 pint/A
BUCTRIL 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
BUCTRIL at 1 - 1 1/2 pints/A + 2, 4-D at 1/8 - 1/4 lb ai/A
BUCTRIL 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

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 specific rates to Canada thistle 4-8 inches tall prior to killing frost. Follow with a similar control program in next year's rotational crop.

ADDITIONAL BUCTRIL® TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Banvel®[1]	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 BUCTRIL at specified rates of application plus improved control of pigweed. For Canada thistle burn down and field bindweed suppression up to the mid-bloom stage, use 1/4 - 1/2 pint/A of Banvel® with BUCTRIL.
	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.	

ADDITIONAL BUCTRIL TANK MIXTURE DIRECTIONS (continued)

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + atrazine + Banvel®[1]	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 BUCTRIL + atrazine tank mixtures at specified rates of application plus improved control of pigweed. For field bindweed suppression, use 1/4 pint/A of Banvel/Clarity with BUCTRIL.
	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.	

[1]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 BUCTRIL or BUCTRIL + atrazine on sorghum.

BUCTRIL + 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 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 BUCTRIL at specified rates plus improved pigweed and kochia control. For Canada thistle burn down and field bindweed suppression up to the mid-bloom stage, use 1/8 - 1/4 lb ai/A of 2,4-D with BUCTRIL.
	1 1/2 pints/A + 1/16-1/4 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.	

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + atrazine + 2,4-D (such as WEEDONE® and WEEDAR® brand Herbicide)	1 pint/A + 1/2-1 1/5 lb ai/A + 1/16 -1/4 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 BUCTRIL + atrazine tank mixtures at specified rates of application plus improved devils claw control. For Canada thistle burn down and field bindweed suppression, use 1/8 - 1/4 lb ai/A of 2, 4-D with BUCTRIL.
	1 1/2 pints/A + 1/2-1 1/5 lb ai/A + 1/16-1/4 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.	
BUCTRIL + Accent® + Non-ionic surfactant	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 when corn is 24 to 36 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by BUCTRIL at 1 or 11/2 pints/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 BUCTRIL or Accent® labels that are least restrictive.
	1 1/2 pint/A + 2/3 oz/A + 1 qt/100 gal 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 tankmix to sorghum.	
BUCTRIL + atrazine + Accent® + Non-ionic surfactant	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 postemergence but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	All broadleaf weeds controlled by BUCTRIL + 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 BUCTRIL 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 the 4-leaf stage of crop growth but before the corn is 12 inches tall. Do not apply this tank mix to sorghum.	

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Beacon ® + Non-ionic surfactant	1 pint/A + 0.38-0.76 oz/A[1] (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 BUCTRIL 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 BUCTRIL or Beacon® labels that are least restrictive.
BUCTRIL + Exceed ® + Non-ionic surfactant	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 BUCTRIL at 3/4-1 pint/A will control all weeds on the BUCTRIL label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Exceed ® at 1.0 ounce/A to BUCTRIL at 3/4-1 pint/A will control all weeds on both the BUCTRIL and Exceed ® labels. Follow the weed size guidelines on the BUCTRIL and Exceed ® labels that are least restrictive.
BUCTRIL + Permit ® + Non-ionic surfactant	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 layby. Do not apply this tank mix to sorghum.	Addition of Permit ® at 1/3 ounce/A to BUCTRIL at 3/4-1 pint/A will control all weeds on the BUCTRIL label at 1 pint/A plus improved control of velvetleaf and pigweed species. Addition of Permit ® at 2/3 ounce/A to BUCTRIL at 3/4-1 pint/A will control all weeds on both the BUCTRIL and Permit ® labels. Follow the weed size guidelines on the BUCTRIL and Permit ® labels that are least restrictive.
BUCTRIL + Stinger®	1 pint/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 BUCTRIL at specified rates of application plus improved Canada thistle burn down. 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.	
BUCTRIL + Atrazine + Stinger®	1 pint/A + 1/2-1 1/5 lb ai/A + 1/3-2/3 pint/A	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 BUCTRIL + atrazine tank mixtures at specified rates of application plus improved Canada thistle burn down. For optimum performance, apply to Canada thistle at least 4 inches in diameter or height but before bud stage.
	1 1/2 pints/A + 1/2 - 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.	

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Pursuit® + Non-ionic surfactant + UAN Fertilizer solution	3/4-1 pint/A + 4 oz/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 BUCTRIL + Pursuit® tank mixtures.	This tank mix will control all broadleaf weeds listed as controlled by BUCTRIL at 1 pint/A plus giant foxtail, redroot pigweed, and other grass and broadleaf weeds listed on the Pursuit® label.
BUCTRIL + Roundup®	Preemergence 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 BUCTRIL at specified 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.

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

- BUCTRIL 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 BUCTRIL.
- Do not apply BUCTRIL 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 BUCTRIL Herbicide application.
- Do not cut crop for feed, fodder or graze within 45 days of application.
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for corn.
- The total cumulative rate must not exceed 2 pints (0.5 pounds bromoxynil) per acre 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 BUCTRIL + Accent ® or BUCTRIL + Beacon® tank mixtures may result in a further increase in crop leaf burn.
- Special care must be taken when using BUCTRIL 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 BUCTRIL.
- Do not apply BUCTRIL 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 BUCTRIL to sorghum.
- Do not apply the BUCTRIL + Pursuit® tank mix except to field corn hybrids known to possess resistance to Pursuit®, or severe crop injury may result.

WHEAT, BARLEY, OATS, RYE, AND TRITICALE

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	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 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 BUCTRIL 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, 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 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.
	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 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.
	Small Grains underseeded with Alfalfa 1-1 1/2 pints/A	Apply to wheat, barley, oats, rye or triticale under seeded with alfalfa after small grains emergence up to the boot stage and when under seeded alfalfa has a minimum of 4 trifoliate leaves. Follow all precautions and restrictions listed under the wheat, barley, oats, rye or triticale 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.

BUCTRIL TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + 2,4-D (such as WEEDONE® and WEEDAR® brand Herbicide)	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.
	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 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.
BUCTRIL + 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.
BUCTRIL + Banvel®	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. FOR USE ON WHEAT, BARLEY, OATS, RYE AND TRITICALE.	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.
BUCTRIL + Glean® + Non-ionic surfactant	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.
BUCTRIL + Ally® + Non-ionic surfactant	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.
BUCTRIL + Finesse® + Non-ionic surfactant	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.
BUCTRIL + Amber® + Non-ionic surfactant	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 flagleaf 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.

BUCTRIL TANK MIXTURE DIRECTIONS (continued)

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Express® + Non-ionic surfactant	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, whichever comes first, and to Canada thistle 4 to 8 inches tall with 2 to 6 inches of new growth.
	3/4-1 1/2 pints/A + 1/6-1/3 oz/A + 1 qt/100 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.	
BUCTRIL + Harmony® Extra + Non-ionic surfactant	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 the 4 leaf stage, 4 inches in height or across, whichever comes first.
BUCTRIL + Curtail® or Curtail® M[4]	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 pre-bud stage.
BUCTRIL + metribuzin (Sencor® or Lexone®)	1-1 1/4 pints/A + 1/8-1/4 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.
BUCTRIL + 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.
BUCTRIL + Tiller®	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 BUCTRIL, this tank mix will control green foxtail from the 2-leaf to 2-tiller stage of growth.

BUCTRIL TANK MIXTURE DIRECTIONS (continued)

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + 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 1-3 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.	
BUCTRIL + 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. **DO NOT USE ON BARLEY**	
BUCTRIL + Avenge®	1-2 pints/A + 2 1/2-4 pints/A	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 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).
		Spring Wheat. Five to 6 leaf stage. Refer to Avenge® label for varietal and other restrictions.	
		Barley. Two to 7 leaf stage.	

RESTRICTIONS AND PRECAUTIONS: 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 under seeded alfalfa is under moisture, temperature, insect, or disease stress or has been stressed by other pesticide carryover or application.
- Do not add surfactant or crop oil when applying to under seeded alfalfa or increased injury will occur.
- Do not cut for feed or graze spring treated under seeded alfalfa within 30 days following treatment.
- Do not cut for feed or graze fall or winter treated under seeded 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 BUCTRIL Herbicide application.
- The total cumulative rate must not exceed 2 pints/A (0.5 pounds bromoxynil) per year.

ALFALFA (SEEDLING)

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	1-1 1/2 pints/A	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 trifoliates. Unacceptable crop injury may occur to alfalfa seedlings less than the 2 trifoliate stage. BUCTRIL 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, 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. BUCTRIL applications made when temperatures are expected to exceed 70°F at and 3 days following application can result in unacceptable crop injury. Follow all other use directions listed on the BUCTRIL label.	Apply 1 pint/A to MOST SUSCEPTIBLE broadleaf weeds and 1 1/2 pints/A to SUSCEPTIBLE broadleaf weeds (See WEED LIST) when weeds do not exceed 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first. BUCTRIL will not adequately control over-wintered pennycress, henbit, and mustards.
BUCTRIL	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 LOADING AND HANDLING INSTRUCTIONS Section for complete details. BUCTRIL 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.

BUCTRIL TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + BUTYRAC® 200 (2,4-DB)	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, BUCTRIL 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, BUCTRIL 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® 200 application can cause unacceptable crop injury.	This tank mix improves 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. BUCTRIL + BUTYRAC 200 tank mixtures will not adequately control over-wintered pennycress, henbit, and mustards.
BUCTRIL + Pursuit® + Non-ionic surfactant	3/4-1 pint/A + 3-6 oz/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 leaf burn, 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. BUCTRIL + Pursuit® applications made when temperatures are expected to exceed 80°F at and 3 days following application can result in unacceptable crop injury.	This tank mix will control MOST SUSCEPTIBLE broadleaf weeds (See 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.

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Pursuit® + Non-ionic surfactant	1/2 - 3/4 pint/A + 3-6 oz/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 leaf burn, 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. BUCTRIL + Pursuit® applications made when temperatures are expected to exceed 70ºF at and 3 days following application can result in unacceptable crop injury.	BUCTRIL at 1/2 pint/A tank mixed with Pursuit® will control common lambsquarters up to 2 inches in height plus weeds listed on the Pursuit® label. BUCTRIL at 3/4 pint/A + Pursuit® will control the MOST SUSCEPTIBLE annual broadleaf weeds (See 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 specific rates.

RESTRICTIONS AND PRECAUTIONS: Alfalfa (Seedling)

- Crop leaf burn can occur following BUCTRIL 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.
- If combined with herbicides requiring oil adjuvants or surfactants, 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.
- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for alfalfa.
- The total cumulative rate of BUCTRIL must not exceed 2 pints (0.5 pounds bromoxynil) per acre per season.
- The use of Eptam® preemergence may enhance crop leaf burn from postemergence application of BUCTRIL and should be considered prior to using BUCTRIL.
- Follow all restrictions and precautions on the tank mixture product label when a BUCTRIL tank mixture is used.
- Tank mixture with 2, 4-DB may result in unacceptable crop leaf burn especially under warm, humid weather conditions.
- BUCTRIL 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 (*Linum usitatissimum* only)

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	1 pint/A	Apply to flax that is 2 to 8 inches in height. Do not apply BUCTRIL to flax during or after the bud stage.	Apply to MOST SUSCEPTIBLE weeds that do not exceed the 4 leaf stage, 2 inches in height or 1 inch in diameter, whichever comes first.

BUCTRIL TANK MIXTURE RECOMMENDATIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Poast® + Crop oil Concentrate 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 tankmix to flax during or after the bud stage, or within 75 days of flax harvest.	This tankmix will control broadleaf weeds plus grassy weeds listed on the Poast label. Apply to MOST SUSCEPTIBLE broadleaf weeds (see list on the BUCTRIL 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 usitatissium* only)

- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- 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 BUCTRIL application to flax grown on high organic, peat type soils.
- Application under high humidity conditions can injure flax.
- Unless otherwise instructed, do not apply BUCTRIL 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 BUCTRIL.
- Do not apply more than 1 pint (0.25 pounds bromoxynil) of BUCTRIL per acre in a single growing season.

GARLIC

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	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 in height or 1 inch in diameter, whichever comes first.
BUCTRIL (Only for garlic grown in muck soils in Northeastern 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.	

PRECAUTIONS AND RESTRICTIONS: Garlic

- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- Use a minimum of 20 gallons per acre for ground application.
- BUCTRIL 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).
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for garlic.
- Do not apply more than 2 pints (0.5 pounds bromoxynil) of BUCTRIL per acre in a single growing season.

MINT
(ESTABLISHED PEPPERMINT AND SPEARMINT ONLY)

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	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.
	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.	

RESTRICTIONS AND PRECAUTIONS: Mint

- Application made to mint when temperatures are expected to exceed 70^{o}F at or 5 days following application may result in unacceptable crop injury. This injury is more likely to occur following BUCTRIL 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 BUCTRIL 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.
- BUCTRIL 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 BUCTRIL 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 (1.5 pounds bromoxynil) of BUCTRIL per acre to mint in a single growing season.
- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for mint.

ONIONS
(DRY BULB)
BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	Preemergence 1-1 1/2 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 BUCTRIL at 1 pint/A to control MOST SUSCEPTIBLE weeds and 1 1/2 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.
	Postemergence 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 (dry bulb)

- The sensitivity of onions to BUCTRIL varies with the variety and environmental conditions. Therefore, even if all the label directions are followed, BUCTRIL application still may cause injury to onions under certain circumstances.
- Do not irrigate onions that have received a preemergence application of BUCTRIL for 2 days following application or within 3 days of crop emergence.
- Do not apply BUCTRIL preemergence to onions grown West of the Mississippi River.
- Do not use BUCTRIL 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 BUCTRIL to onions with aerial equipment.
- Do not add surfactant.
- Do not apply more than 1 ½ pints (0.375 pounds bromoxynil) of BUCTRIL per acre per year.
- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 2 days for onion.

GRASS CROPS

CONSERVATION RESERVE PROGRAM (CRP) AREAS

BUCTRIL DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL	1- 2 pints/A	Apply to grasses after emergence. If alfalfa is planted, apply after the 4 trifoliate 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.
	Chemigation 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.	

BUCTRIL TANK MIXTURE DIRECTIONS

		APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**RATE**	**CROP**	**WEEDS**
BUCTRIL + Rhomene® 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.

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 BUCTRIL to CRP areas planted with alfalfa or other legumes.
- Do not apply BUCTRIL 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 1 1/2 pints/A (0.375 pounds bromoxynil) per year of BUCTRIL to CRP areas that are under seeded with alfalfa.

GRASSES GROWN FOR SEED OR SOD PRODUCTION

BUCTRIL DIRECTIONS
Seedling and Established Grasses

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**Per ACRE**	**Per 1000 SQ FT**	**CROP**	**WEEDS**
BUCTRIL	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 BUCTRIL include bentgrasses, Kentucky Bluegrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass and Zoyiagrass. BUCTRIL 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 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).
BUCTRIL	Chemigation 2 pints 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 BUCTRIL.	

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 BUCTRIL to grasses grown for seed or sod production with backpack or hand-held application equipment.
- Do not apply more than 2 pints (0.5 pounds bromoxynil) of BUCTRIL per acre per year.
- Do not plant rotational crops within 30 days following BUCTRIL Herbicide application.
- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours for sod.

NON-RESIDENTIAL TURFGRASS

BUCTRIL DIRECTIONS
Seedling and Established Non-Residential Turfgrass

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**Per ACRE**	**Per 1000 SQ FT**	**CROP**	**WEEDS**
BUCTRIL	1 to 2 Pints	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 BUCTRIL include bentgrasses, Kentucky Bluegrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass, and Zoyiagrass. BUCTRIL 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 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 BUCTRIL to non-residential turf with backpack or hand-held application equipment.
- Do not apply more than 2 pints (0.5 pounds bromoxynil) of BUCTRIL per acre per year.

BUCTRIL TANKMIXTURE RECOMMENDATIONS
Established Non-Residential Turfgrass

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**Per ACRE**	**Per 1000 SQ FT**	**CROP**	**WEEDS**
BUCTRIL + WEEDONE® DPC Ester	2 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.	All weed species previously listed in the WEED LIST for BUCTRIL plus the following species: Dandelion (*Taraxacum officinale*) Plantains (*Plantago spp.*) Ground Ivy (*Glechoma hederacea*) Red Clover (*Trifolium pratense*) White Clover (*Trifolium repens*) Hop Clover (*Trifolium agrarium*) Common Chickweed (*Stellaria media*) Prostrate Spurge (*Euphorbia supina*) Oxalis (*Oxalis europaea*) 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).
BUCTRIL + 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 WEED LIST for BUCTRIL plus the following species: Red Clover (*Trifolium pratense*) White Clover (*Trifolium repens*) Common Chickweed (*Stellaria media*) Mouseear Chickweed (*Cerastium vulgatum*) Ground Ivy (*Glechoma hederacea*) Stitchwort (*Stellaria gramminea*) Knotweed (*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).
BUCTRIL + 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 bentgrasses, St. Augustinegrass, centipedegrass, and carpetgrass.	All weed species previously listed in the WEED LIST for BUCTRIL plus the following species: Red Clover (*Trifolium pratense*) White Clover (*Trifolium repens*) 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).

Established Non-Residential Turfgrass (CONT.)

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**Per ACRE**	**Per 1000 SQ FT**	**CROP**	**WEEDS**
BUCTRIL + MCPP + 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 centipedegrass.	All weed species previously listed in the WEED LIST for BUCTRIL and BUCTRIL/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).
BUCTRIL + MCPP + 2.4-D	2 Pints + 0.5 to 1.0 lb ai + 0.5 to 1.0 lb ai	0.75 Fl. Oz. + 0.0125 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 centipedegrass.	All weed species previously listed in the WEED LIST for BUCTRIL and BUCTRIL/2,4-D tank mixtures plus the following species: Dandelion (*Taraxacum officinale*) Plantains (*Plantago spp.*) Red Sorrell (*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: Non-residential turfgrasses

- BUCTRIL /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 BUCTRIL to non-residential turf with backpack or hand-held application equipment.
- Do not apply more than 2 pints (0.5 pounds bromoxynil) of BUCTRIL per acre per year.

NON-CROPLAND

NON-CROPLAND AND INDUSTRIAL SITES

BUCTRIL DIRECTIONS

	RATE	RATE	APPLICATION TIMING AND SPECIFIC COMMENTS	
PRODUCT	**Per ACRE**	**Per 1000 SQ FT**	**CROP**	**WEEDS**
BUCTRIL	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 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 burn down of broadleaf weeds under cool, dry conditions.
- Do not apply BUCTRIL to non-cropland and industrial sites with backpack or hand-held application equipment.
- Do not apply more than 2 pints (0.5 pounds bromoxynil) of BUCTRIL per acre per year.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state and local regulations and procedures

CONTAINER HANDLING AND DISPOSAL:

[*Container Handling and Disposal for Nonrefillable Containers*]

Nonrefillable container.

For nonrefillable containers of 5-gallon capacity or less

Do not reuse the container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

Triple rinse or pressure rinse (or equivalent) the container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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

For nonrefillable containers of greater than 5-gallon capacity

Do not reuse or refill this container.

Triple rinse or pressure rinse (or equivalent) the container promptly after emptying.

Triple rinse large nonrefillable containers NOT equipped with pumping systems as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the container on its side and roll it back and forth for 30 seconds, ensuring at least one complete revolution. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix-tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Triple rinse large nonrefillable containers equipped with pumping systems as follows: Empty the remaining contents into application equipment or mix-tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Pressure rinse large containers as follows: Empty the remaining contents into application equipment or mix-tank. Place container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle through the opening of the container or directly into the side of the container and rinse at about 40 PSI for at least 30 seconds or until rinsate runs clear. Continue to drain for 10 seconds after the flow begins to drip.

Once the nonrefillable container is properly rinsed, offer for recycling, if available. Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to the container, if available. If no recycling information is available on the container, contact your chemical dealer or Bayer CropScience at 1-866-99BAYER (1-866-992-2937), or contact the Ag Container Recycling council (ACRC) at 1-877-952-2272 or at www.acrecycle.org, to find the nearest recycling location. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Container Handling and Disposal for Refillable Containers*]

Refillable container. Refill the container with pesticide only. Do not reuse the container for any other purpose.

Cleaning the container before refilling is the responsibility of the refiller. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Triple rinse or pressure rinse (or equivalent) the container promptly after emptying and before final disposal.

To triple rinse the refillable container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

To pressure rinse the refillable container before final disposal, empty the remaining contents from the container into application equipment or mix-tank. Position the container so that it can drain directly into application equipment or mix-tank while rinsing, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle through the opening of the container or directly into the side of the container and rinse all interior area at about 40 PSI for at least 30 seconds or until rinsate drains clear.

Once the refillable container is properly rinsed, offer for recycling, if available. Some container manufacturers offer container recycling. See additional information regarding manufacturer recycling programs attached to the container, if available. If no recycling information is available on the container, contact your chemical dealer or Bayer CropScience at 1-866-99BAYER (1-866-992-2937), or contact the Ag Container Recycling council (ACRC) at 1-877-952-2272 or at www.acrecycle.org, to find the nearest recycling location. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Optional additional container disposal statement:* IBC EMPTY? – FREE CALL – 1-888-SCHUETZ (1- 888-724-8389) www.schuetz.net/ticket; Schuetz ticket service]

[*Optional additional container disposal statement:* FREE IBC PICKUP] [For continental USA and Canada only.]

[*Optional additional container disposal statement:* RETURNnet SYSTEM – To return empty IBC's Email or Call – www.returnnetsystem.com – 1-888-758-SHIP – United States and Canada (1-888-758-7447 – IBCNA – Clarkston, Michigan – USA]

[*Optional additional container label statements for the CUBE refillable packaging system only:*
CUBE Bayer CropScience Refillable Delivery System
FEATURES INCLUDE:
- Automatic Venting
- Heavy duty one-way 2-inch camloc ball valve with protective shield door
- Complete coated steel protective enclosure
- Durable 4-way plastic pallet

Lift door to access one-way valve]

[*For Transport Vehicle labels only, as defined at 40 CFR § 156.3*]

FOR BULK PESTICIDE TRANSPORT ONLY.

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

PESTICIDE DISPOSAL: To avoid waste, empty as much product from this transport vehicle as possible for repackaging or use in accordance with label directions. If wastes cannot be avoided, offer remaining product or rinsate to a waste disposal facility or pesticide disposal program. All disposal must be in accordance with applicable federal, state and local regulations and procedures.

CONTAINER HANDLING AND DISPOSAL: Emptied transport vehicle container retains vapor and product residue. Observe all precautions stated on this label until the container is cleaned, reconditioned or destroyed. Prior to refilling,

inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closures. Clean thoroughly before reuse for transportation of a material of different composition or before retiring this transport vehicle container from service.

THIS LABEL FOR USE WITH TRANSPORT VEHICLES ONLY

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the 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 Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Warning: This product contains a chemical known to the State of California to cause developmental harm.

NET CONTENTS: 2.5 GALLONS

Produced for

Bayer CropScience LP
800 N. Lindbergh Blvd.
St. Louis, MO 63167
1-866-99BAYER (1-866-992-2937)

BUCTRIL Herbicide (PENDING) 08/23/2021, 1/14/2022, 05/11/2022, 05/19/2022