

# A NON-SELECTIVE HERBICIDE FOR POST-EMERGENCE BROADCAST USE.

# **ACTIVE INGREDIENT:**

Glufosinate ammonium*	24.5%
OTHER INGREDIENTS:	75.5%
TOTAL:	00.0%

\*Liquid soluble concentrate containing 2.34 pounds of active ingredient per U. S. gallon

# WARNING - AVISO

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.)

EPA Reg. No. 42750-258-89442

AD080218

SEE LABEL BOOKLET FOR COMPLETE FIRST AID, PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND STORAGE AND DISPOSAL.

**Distributed for:** Prime Source, a division of Albaugh, LLC 1525 NE 36th Street
Ankeny, IA 50021

FIRST AID		
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF IN THE EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not give any liquid to the person.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE AT 1-800-424-9300.

**NOTE TO PHYSICIAN:** If this product is ingested endotracheal intubation and gastric lavage should be performed as soon as possible followed by charcoal and sodium sulfate administration.

## PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye injury. Harmful if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before use. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber). Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

• Long-sleeved shirt and long pants, shoes and socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products 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.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 3. 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.

#### **ENGINEERING CONTROL STATEMENT**

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.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water or to areas where surface water is present. Do not apply to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters or rinsate.

This pesticide is toxic to vascular plants and must be used strictly in accordance with the drift and run off precautions on this label in order to minimize off site exposures.

Under some conditions this product may have a potential to run off to surface water or adjacent land. Where possible use methods which reduce soil erosion such as no till limited till and contour plowing these methods also reduce pesticide run off. Use of vegetation filter strips along rivers creeks streams wetlands etc. or on the downhill side of fields where run off could occur to minimize water runoff is advised.

#### DIRECTIONS FOR USE

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

Do not use this product until you have read the entire label. 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.

In the State of New York Only: Not For Use in Nassau and Suffolk Counties.

#### **AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the restricted entry-interval (REI) of 12 hours with the following exceptions:

- REI for workers engaged in scouting activities in corn, canola, and soybeans is 4 days.
- The REI for workers to move irrigation piping is 7 days for all crops.

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 worn over short-sleeved shirt and short pants; chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq$ 14 mils, nitrile rubber  $\geq$ 14 mils, neoprene rubber  $\geq$ 14 mils, polyvinyl chloride (PVC)  $\geq$ 14 mils, or Viton®  $\geq$ 14 mils; chemical-resistant footwear plus socks; protective eyewear (goggles, face shield or safety glasses.

#### Mandatory Spray Drift Mitigation:

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- For aerial applications, do not release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

# Advisory Spray Drift Language

**POLLINATOR ADVISORY STATEMENT:** This product contains an herbicide. Follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.

#### Spray Drift Management:

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### Importance of Droplet Size:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See **Wind**, **Temperature and Humidity**, and **Temperature Inversions** sections of this label.

# Techniques for Controlling Droplet Size:

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- · Boom Length Longer booms increase drift potential. Therefore, a shorter boom length is recommended.
- Application Height Application more than 10 ft. above the canopy increases the potential for spray drift.
- Boom Height Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **Drift Reduction Technology (DRT)**

The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies

- Wind Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.
- Temperature and Humidity When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce
  effects of evaporation.
- Temperature Inversions Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which
  causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are
  characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin
  to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present,
  inversions can also be identified 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.
- Shielded Sprayers Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### **PRODUCT INFORMATION**

X-Out is a water-soluble herbicide for application as a foliar spray for the control of a broad-spectrum of emerged annual and perennial grass and broadleaf weeds.

**X-Out** is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled. Uniform, thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

- X-Out is rainfast four (4) hours after application to most weed species; therefore, rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control.
- Applications must be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters palmer amaranth and velvetleaf control.
- Consult your local Cooperative Extension Service or Prime Source, a division of Albaugh, LLC representative for guidelines on the optimum application timing for **X-Out** in your region.
- Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due
  to environmental conditions such as drought, cool temperatures or extended periods of cloudiness.
- Warm temperatures, high humidity and bright sunlight improve the performance of X-Out.
- X-Out is a foliar-active material with little or no soil-residual activity.
- To maximize weed control, do not cultivate from 5 days before an application to 7 days after an application.

#### ROTATIONAL CROP RESTRICTIONS

Rotational crop planting intervals following application of **X-Out** are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Corn, Sweet Corn, Cotton, Rice, Soybean and Sugar Beet	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 Days
All Other Crops	180 Days

#### WEED RESISTANCE MANAGEMENT

For resistance management, **X-Out** is a Group 10 herbicide (glutamine synthetase inhibitor). Any weed population may contain or develop plants naturally resistant to **X-Out** and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

Contact your local sales representative, crop advisor or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

Fields should be scouted prior to application to identify the weed species present and their growth to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.

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

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds:
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

Report any incidence of non-performance of this product against a particular weed species to your Prime Source, a division of Albaugh, LLC representative. If resistance is suspected, treat weed escapes with an herbicide having a different mode of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

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

- Start with clean fields. Plant into weed-free fields and keep fields as weed free as possible. Effective tillage or the use of a burndown herbicide program can control emerged weeds prior to planting.
- Scout fields.
- **Diversified approach.** To the extent possible, use a diversified approach towards weed management. Whenever possible, incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Rotate crops. Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative modes of action or different management practices.
- **Control weed escapes.** To the extent possible, do not allow weed escapes to produce seeds, roots or tubers. Manage weeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Clean equipment. Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Manage borders. Prevent an influx of weeds into the field by managing borders.
- Know your weeds, know your fields. Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Rotate mechanisms of action. Difficult to control weeds ma require sequential applications of herbicides with differing mechanisms
  of action. Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a
  weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a
  single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficultto-control weeds. If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods
  to remove escapes.
- · Apply herbicide correctly. Apply this herbicide at the correct timing and rate to control the most difficult weed in the field.

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 more information on Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) on the web at http://www.hracglobal.com.

#### **APPLICATION AND MIXING PROCEDURES**

Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment. Uniform thorough spray coverage is important to achieve consistent weed control.

Ground Application: Refer to the Rate Tables for proper application rates.

Aerial Application: Poor coverage will result in reduced weed control. See the Spray Drift Management section of this label for additional information on proper application of X-Out.

#### **CLEANING INSTRUCTIONS**

Before using **X-Out**, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Equipment must be thoroughly rinsed using a commercial tank cleaner.

After using **X-Out**, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink®. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

#### **NOZZLE SPRAY QUALITY**

Use Medium to Coarse nozzles. **X-Out** is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See nozzle section for more detailed information.

#### **NON-CROP USES**

X-Out controls annual and perennial weeds in non-crop areas defined below in the WHERE TO APPLY section. Applications may be made on a broadcast, banded or spot treatment basis depending on the situation. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from underground parts or seed.

#### WHEN TO APPLY

**X-Out** is a foliar-active material. Best results are obtained when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest rate directed.

X-Out must be applied at the labeled rate in the HOW TO APPLY section. Repeat applications of X-Out or tank mixes of X-Out plus one or more appropriate residual herbicide(s) listed on this label will be needed to control weeds emerging from underground parts or seeds.

#### **HOW TO MIX**

X-Out must be mixed with water to make finished spray solution as follows:

- 1. Fill the spray tank with the required amount of water.
- 2. Add the proper amount of product, then mix thoroughly.

#### **HOW TO APPLY**

#### **Spot or Directed Applications**

This product may be used as a spot or directed spray application using 0.4 to 0.75 fl. oz./gal. of water (0.007 - 0.014 lb. a.i./gal. of water) of water depending upon the weed and stage of growth as shown in the following sections. Spray undesirable vegetation foliage on a spray-to-wet basis. Do not apply beyond runoff. Ensure uniform and complete coverage. Use a coarse spray. Do not spray during windy conditions. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

When making spot treatments DO NOT exceed broadcast per acre use rates.

#### **Broadcast or Boom Applications**

Apply 12 - 38 fl. oz./A (0.22 - 0.69 lb. a.i./A) depending upon the weed and stage of growth as shown in the following sections. Use a minimum of 40 gallons of water per acre with a minimum of 30-psi spray pressure.

#### **Aerial Applications**

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage. Do not apply when winds are gusty or under conditions which favor drift on to desirable vegetation. Applications under conditions which cause drift of this product will result in damage to any vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

#### Tank Mix Directions for Non-Crop Uses

X-Out is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate.

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

Tank mix applications of X-Out plus the following herbicides are advised for broad-spectrum post-emergence and pre-emergence weed control:

Isopropylamine salt of imazapyr	butroxydim	norflurazon
prodiamine	isoxaben	Diglycolamine salt of 3,6-dichloro-o-anisic Acid
oryzalin	pendimethalin	oxadiazon

A compatibility test must be conducted with any potential tank mix partner with X-Out, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below:

- 1. Fill the jar three-quarters full with water.
- 2. Add the appropriate amount of herbicide in the following order: (a) dry flowable, (b) wettable powder, (c) aqueous suspensions, (d) flowables,(e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.
- 3. After adding all ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oily film on the jar or other signs of incompatibility.
- 4. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with X-Out.

#### For the Following Weeds Controlled by X-Out Apply:

#### **Spot Application:**

Apply 0.75 fl. oz./gal. of water (0.014 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.25 fl. oz./gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

#### **Broadcast Application:**

Apply 40 fl. oz./A (0.73 lb. a.i./A) when the weed height or diameter is less than 6 inches. Apply 56 fl. oz./A (1.02 lbs. a.i./A) when the weed height or diameter is 6 inches or greater.

#### **Broadleaf Weeds**

Chickweed	Jimsonweed	Marestail
Clover	Kochia	Purslane
Common Cocklebur	London Rocket	Shepherd's Purse
Filaree	Malva (little mallow)	Smartweed

#### **Grasses and Sedges**

Barnyardgrass	Green Foxtail	Stinkgrass
Cupgrass	Johnsongrass (rhizome)	Windgrass
Fall Panicum	Lovegrass	Yellow Foxtail
Giant Foxtail	Shattercane	

Goosegrass Smallflower Alexandergrass (Signalgrass)

# For the Following Weeds Controlled by X-Out Apply:

## **Spot Application:**

Apply 1.25 fl. oz./gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.75 fl. oz./gal. of water (0.032 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

#### **Broadcast Application:**

Apply 56 fl. oz./A (1.02 lbs. a.i./A) when the weed height or diameter is less than inches tall. Apply 80 fl. oz./A (1.46 lbs. a.i./A) when the weed height or diameter is 8 inches or greater.

#### **Broadleaf Weeds**

Annual sowthistle	Lambsquarters	Tansy mustard
Bindweed	Leafy spurge	Velvetleaf
Buffalorbur	Mugwort	Vervain
Burdock	Musk thistle	Virginia copperleaf
Canada thistle	Nettle	White heath aster
Curly dock	Nightshade	Wild buckwheat
Dandelion	Pennycress	Wild mustard
Dogbane (hemp)	Pigweed, redroot	Wild onion
Field growwell	Plantain	Wild rose
Fleabane	Prickly lettuce	Wild turnip
Goldenrod	Ragweed	Wood sorrel
Horsetail	Russian thistle	Yellow rocket

#### **Grasses and Sedges**

Annual Downy bromegrass Ryegrass bluegrass Fescue Sandbur

BahiagrassGuineagrassSmooth bromegrassBarleyKentucky bluegrassTorpedograssBermudagrassNutsedgeVaseygrassCarpetgrassParagrassWheatCrabgrassQuackgrassWild oat

Dallisgrass

#### **Additional Use Directions**

- 1. Use higher rates within the directed rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions such as drought or when average temperatures are below 50°F.
- 2. The addition of 8.5 to 17 pounds of ammonium sulfate (spray grade) per 100 gallons of water (1 to 2% by weight) or 2 to 4 pounds of ammonium sulfate per acre may improve the level of weed control.

# Use on Woody Species (Not For Use in California)

When applied as labeled, **X-Out** will provide control, partial control, or suppression of certain perennial woody weed species. Apply 64 - 192 fl. oz./A (1.19 - 3.51 lbs. a.i./A). Use the higher specified rates per acre of this product when conditions are not optimum for spray penetration, such as when vegetation growth is heavy or dense. Lower specified rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

Blackberry Rubus spp.

Deer brush Ceanothus integerrimus
Douglas fir Pseudotsuga menziesii

Gallberry *llex* spp. Hazel Corylus spp. Honeysuckle Lonicera spp. Huckleberry Gaylussacia spp. Maple Acer spp. Multiflora rose Rosa multiflora Oak Quercus spp. Pine Pinus spp.

Poison ivy Toxicodendron radicans
Poison oak Toxicodendron toxicarium
Roundleaf greenbrier Smilax rotundifolia
Salmonberry Rubus spectabilis
Sweet gum Liquidambar styraciflua

Sumac Rhus spp.
Thimbleberry Rubus parviflorus
Trumpetcreeper Campsis radicans
Vine maple Acer circinatum
Western red cedar Thuja plicata

# WHERE TO APPLY Trimming and Edging

X-Out may be used for trimming and edging landscape areas including: around individual trees and shrubs, landscape beds, foundations, fences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. For control of weeds emerging from seed, the use of X-Out in a tank mix with pre-emergence herbicides is advised. If spraying in areas adjacent to desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the HOW TO APPLY section of this labeling for appropriate application rates to control specific weeds.

#### Farmsteads, Recreational and Public Areas

When applied as a spot or directed spray application, this product controls annual and perennial weeds listed on this label in areas including: areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, roadsides, schools, parking lots, tank farms, pumping stations, and parks. Refer to the **HOW TO**APPLY section of this labeling for appropriate application rates to control specific weeds.

#### Dormant Bermudagrass (Not for use on Residential Turf/Turfgrass/Lawns)

X-Out may be used to control winter annual weeds in well-established ornamental dormant hybrid or common Bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply X-Out at a rate of 40 - 80 fl. oz./A (0.73 - 1.46 lbs. a.i./A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by X-Out section of this label for selecting specified rates. Applications of X-Out may also be used to suppress or control undesirable biennial or perennial weeds. Do not apply more than 80 fl. oz. (1.46 lbs. a.i.) of X-Out per acre per year for this use. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed green-up may occur.

#### **Ornamentals and Christmas Trees**

When applied as specified by this label, this product may be used for the control of undesirable vegetation in site preparation prior to planting, around and within shade and greenhouses, and as a directed spray around containers and field-grown established ornamentals and Christmas trees.

**DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result.

DO NOT apply X-Out as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.

#### **Directed Spray Application:**

X-Out may be applied as a directed spray to control in-row weeds in field-grown woody plants. Refer to the HOW TO APPLY section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting.

#### Site Preparation Application:

This product may be used for pre-plant site preparation for the control of annual and perennial weeds listed on this label, in ornamental and Christmas tree plantings. Ornamentals and Christmas trees may be planted into the treated area after the restricted-entry interval (REI) of 12 hours has elapsed. Refer to the **HOW TO APPLY** section of this labeling for appropriate application rates to control specific weeds.

# Greenhouse and Shade House Applications:

X-Out may be used to control weeds in greenhouses and shade-houses. Air circulation fans must be turned off during application. Apply X-Out as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation. Do not use in greenhouses or shade houses containing edible crops.

#### **USE RESTRICTIONS FOR NON-CROP USE**

- DO NOT apply this product through any type of irrigation system.
- DO NOT apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation.
- DO NOT allow grazing of vegetation treated with this product.
- DO NOT exceed maximum use rate of 80 fl. oz./A (1.46 lbs. a.i./A) per single application for broadcast or boom applications.
- DO NOT make more than 3 applications per year for broadcast or boom applications but no more than 2 applications per year on Dormant bermudagrass.
- DO NOT exceed maximum use rate of 1.75 fl. oz./gal. of water (0.032 lb. a.i./gal. of water) for spot or directed applications and do not apply beyond runoff.
- **DO NOT** apply more than 240 fl. oz. (4.50 lbs. a.i./A) of this product per acre per year to non-crop areas except on Dormant Bermudagrass do not apply more than 80 fl. oz. per acre per year.
- Applications must be made at least 14 days apart in non-crop areas.

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature must not exceed 125°F. If storage temperature for bulk **X-Out** is below 32°F, the material must not be pumped until its temperature exceeds 32°F. Protect against direct sunlight.

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

#### **CONTAINER HANDLING:**

#### [Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)]

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

#### [All refillable container types (containers with capacities greater than 50 lbs.)]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. This is a sealed returnable container to be used only for **X-Out**. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

# [Bottom discharge Intermediate Bulk Container (IBC) (containers with capacities greater than 50 lbs.)]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Empty the remaining contents from the Intermediate Bulk Container (IBC) into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inch on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve. Contact your Ag retailer or Prime Source, a division of Albaugh, LLC for container return, disposal and recycling directions.

**SEED DISPOSAL:** To dispose of out-of-date or otherwise unmarketable seed from plants which have been treated with **X-Out**, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

#### **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 Prime Source, a division of Albaugh, LLC. To the extent consistent with applicable law all such risks shall be assumed by the user or buyer.

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