### RESTRICTED USE PESTICIDE (GROUND AND SURFACE WATER CONCERNS)

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.



# ATRAZINE 90 WDG HERBICIDE

For Season-Long Weed Control in Corn, Sorghum and Certain Other Crops.

#### **ACTIVE INGREDIENTS:**

Atrazine (2-chloro-4-	ethylamino-6-isopropylamino-s-tr	iazine)	88.2%
Related compounds			
<b>OTHER INGREDIENTS</b>			<u>10.0%</u>
			TOTAL 100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> </ul>
	<ul> <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>
If Inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>
	• Call a poison control center or doctor for further treatment advice.
lf on skin	Take off contaminated clothing.
or clothing:	<ul> <li>Rinse skin-immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison-control center or doctor for treatment advice.</li> </ul>
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 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>

#### FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

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

**Note to Physician:** There is no specific antidote for atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.

See Below For Additional Precautionary Statements.

EPA REG. NO. 34704-622

EPA EST. NO. 100-LA-001

**NET WEIGHT 25 LBS. (11.34 KG)** 

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Avoid breathing dust. Causes eye irritation. Avoid contact with eyes, skin or clothing.

#### **Personal Protective Equipment:**

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

#### Mixers, loaders, cleaners of equipment or spills, and other handlers exposed to the concentrate must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or viton,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron, and
- A NIOSH-approved dust/mist filtering respirator with any N, R, P, or HE filter or a NIOSH-approved dust/mist filtering respirator with approval number prefix TC-21C.

#### Applicators using spray equipment mounted on their backs must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or viton, and
- Chemical-resistant footwear plus socks.

#### All other applicators and all other handlers exposed to the dilute must wear:

- Long sleeved shirt and long pants,
- Shoes plus socks, and
- Chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or viton. Aerial application is prohibited.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **Engineering controls statements:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with 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.

#### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

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

Atrazine can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. Atrazine has been found in groundwater. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Product must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. Product must not be applied within 66 feet of points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 foot buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Product must not be mixed or loaded, or used within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited, unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad.

Surface water shall not be allowed to either flow over or from the pad which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide to the mixing/loading sites.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

One of the following restrictions must be used in applying atrazine to tile-terraced fields containing standpipes:

- Do not apply within 66 feet of standpipes in tile-outletted terraced fields.
- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2 to 3 inches in the entire field.
- Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue
  management practice is practiced. High crop residue management is described as a crop management practice
  where little or no crop residue is removed from the field during and after crop harvest.

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

#### **DIRECTIONS FOR USE**

#### Aerial application is prohibited.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazine-watershed. info, or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Loveland Products, Inc. for a refund.

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **AGRICULTURAL USE REQUIREMENTS**

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

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception:** if the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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.
- · Shoes plus socks, and
- Chemical-resistant gloves, such as any waterproof material.

#### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard 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 until sprays have dried.

#### PRODUCT INFORMATION

Atrazine 90 WDG Herbicide controls\* many annual broadleaf and grass weeds in the crops included on this label. Atrazine 90 WDG Herbicide may be applied before or after weeds emerge.

\*Important Note: Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. These weeds may include lambsquarters, pigweed, black nightshade, kochia, and others. Where this is known or suspected, we recommend the use of this product in combination with other registered herbicides which are not triazines. Consult your State Agricultural Extension Service about specific weed resistance to atrazine in your area and weed control recommendations. Within the specific crop directions on this label, certain weeds are indicated for suppression only. Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with rate used, size of weeds, and environmental conditions following treatment.

In each case where a range of rates is given, the lower rate should be used on light soils and soils low in organic matter, and the higher rate should be used on heavy soils high in organic matter.

Since Atrazine 90 WDG Herbicide acts mainly through root absorption, its effectiveness depends on rainfall or irrigation to move it into the root zone. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control. Care should be taken to avoid using Atrazine 90 WDG Herbicide where adjacent desirable trees, shrubs, or plants might be injured.

**Note:** Loveland Products Inc. does not recommend the use of Atrazine 90 WDG Herbicide in combination with other herbicides or oils except as specifically described on this label or supplemental labeling distributed by Loveland Products, Inc.

#### **APPLICATION PROCEDURES**

**Ground application:** Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10.0 gallons of spray mixture per acre for all preplant incorporated, preplant surface, preemergence, and postemergence applications (with or without oil or surfactant) with ground equipment.

Use a pump with capacity to:

- 1. Maintain 35 to 40 psi at nozzles,
- 2. Provide sufficient agitation in tank to keep mixture in suspension, and
- 3. To provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10.0 gallons per minute per 100 gallons tank size circulated through a correctly positioned sparger tube or iets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band applications, calculate amount to be applied per acre as follows:

<u>band width in inches</u> x broadcast rate = amount needed row width in inches per acre per acre of field

**Chemigation:** Do not apply this product through any type of irrigation system.

#### **Application in water:** Mixing procedures:

- 1. Be sure sprayer is clean and not contaminated with 2,4-D, residual oil, or other materials.
- 2. Fill tank 1/2 to 2/3 full with clean water.
- 3. Start agitation.
- 4. Pour this product directly from package into tank. Let it wet and settle into the water.
- 5. Finish filling tank with water. Continue agitation during mixing and application.

**Application in liquid fertilizer:** Nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for preemergence, preplant incorporated, or preplant surface ground application on corn and sorghum. Check the compatibility of this product with liquid fertilizer and/or nitrogen solution as shown below before use. Do not apply in nitrogen solution or complete liquid fertilizer after corn or sorghum emerges, except as noted under **Postemergence** for corn, or crop injury may occur.

**Compatibility Test:** Since liquid fertilizers can vary, even within the same analysis, always **check compatibility with herbicide(s) each time before use**. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25.0 gallons per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1.0 pint of fertilizer to each of 2 one-quart jars with tight lids.
- 2. To **one** of the jars add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Compex®, E-Z Mix, or Unite™ (1/4 teaspoon is equivalent to 2.0 pints per 100 gallons spray). Shake or stir gently to mix.
- 3. To **both** jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry herbicides: For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

Liquid herbicides: For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods if improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

**Application in water plus emulsifiable oil or oil concentrate:** Adding emulsifiable oil (petroleum-derived, petroleum-derived oil concentrate, or single or mixed crop-derived oil concentrate) to postemergence water-based sprays in corn and sorghum may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure the crop. To minimize this possibility, observe all following directions. Use one of the following properly emulsified:

- 1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
- 2. Petroleum-derived oil containing at least 1% suitable emulsifier.

**Note:** In the event of a compatibility problem when mixing oil with Atrazine 90 WDG Herbicide and water, a compatibility agent such as Compex, E-Z Mix, or Unite should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

#### Mixing procedures-all uses:

- 1. Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result.
- 2. Fill tank 1/4 full with clean water, nitrogen solution, or complete liquid fertilizer.
- 3. Start agitation.
- 4. Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
- 5. Pour product directly from package into tank.
- 6. Continue filling until 90% full. Increase agitation if necessary to maintain surface action.
- 7. Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended.
- 8. Finish filling tank.
- 9. Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue. Maintain agitation to avoid separation of materials.
- 10. If an oil or emulsifiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent.
- 11. Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

#### APPLICATION RESTRICTIONS

Aerial application is prohibited. Do not apply this product through any type of irrigation system.

When tank-mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, the total pounds atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre per year.

When tank-mixing or sequentially applying atrazine or products containing atrazine to crops other than corn or sorghum, the total pounds of atrazine applied (pounds active ingredient per acre) must not exceed the specific seasonal rate limits as noted in the use directions.

#### ROTATIONAL CROP RESTRICTIONS FOR ALL USES

- 1. Land treated with Atrazine 90 WDG Herbicide should not be planted to any crop except corn or sorghum until the following year or injury may occur.
- 2. If Atrazine 90 WDG Herbicide is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
- 3. In the High Plains and Intermountain area of the West where rainfall is sparse and erratic or where irrigation is

- required, use Atrazine 90 WDG Herbicide only when corn or sorghum is to follow corn or sorghum, or a crop of untreated corn or sorghum is to precede other rotational crops.
- 4. In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 2.2 pounds per acre or equivalent band application rate, as soybean injury may occur.
- 5. Injury may occur to soybeans planted in north-central and northwest IA, southcentral and southwest MN, north east NE, southeast SD, and other areas the year following application on soils having a calcareous surface layer.
- 6. Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains or small-seeded legumes and grasses the year following Atrazine 90 WDG Herbicide application for injury may occur.

#### CORN AND SORGHUM WEED CONTROL/SUPPRESSION

### Preplant Surface-Applied, Preplant Incorporated, or Pre-emergence (or Postemergence at 2.2 pounds per acre with Oil)

Broadleaf and Grass Weeds Controlled

annual morningglory	kochia*	ragweed
barnyardgrass** (watergrass)	lambsquarters*	sicklepod
cocklebur*	large (hairy) crabgrass*	velvetleaf** (buttonweed)
giant foxtail*	mustards	wild oats
green foxtail**	nightshade*	witchgrass** ( <i>Panicum capillare</i> )
groundcherry	pigweed*	yellow foxtail*
iimsonweed	purslane	

#### Postemergence with Emulsifiable Oil or Oil concentrate in Water (at 1.3 pounds per acre)

Broadleaf	Weeds C	Controlled
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annual morningglory cocklebur*	mustards pigweed*	wild buckwheat velvetleaf*	
jimsonweed lambsquarters*	ragweed smartweed		

**Note:** For best control of Cocklebur and Velvetleaf, do not apply less than the specified 2.2 pounds per acre.

\* Maximum rate limitations and local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION section of this label.

#### MAXIMUM RATES PRIOR TO CORN OR SORGHUM EMERGENCE

For single preemergent broadcast applications (including early preplant, preplant incorporated, preplant surface, at planting or pre-emergence) the following maximum use rates apply:

Soil Erodibility Classification*	Plant Residue Amount	Maximum Rate/Acre
Highly erodible	30% or more	2.0 lbs Al
	(conservation tillage program)	
	Less than 30%	1.6 lbs Al
	(conventional tillage program)	
Not highly erodible	No limit	2.0 lbs Al

<sup>\*</sup>As defined by the Natural Resource Conservation Service

<sup>\*\*</sup> Suppression or partial control only on medium and fine textured soils.

#### MAXIMUM RATES AFTER CORN OR SORGHUM EMERGENCE

For postemergence applications, the following maximum rates apply to the total of all atrazine treatments:

Previous Soil Application Of Atrazine To Crop	Total Maximum Rate/Acre/Calendar Year	
No	2.0 lbs Al postemergence	
Yes	2.5 lbs AI combined from soil and postemergence	
	applications	

Atrazine 90 WDG Herbicide contains 0.9 lb Al/lb.

#### **CORN**

Atrazine 90 WDG Herbicide may be applied before planting, at planting or after planting, subject to maximum rate limitations.

Postemergence applications to corn must be made before corn reaches 12 inches in height.

**Preplant Surface-Applied (Broadleaf and grass control):** Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, and WY. Apply the specified rate of Atrazine 90 WDG Herbicide shown in Table 1 up to 30 days prior to planting. On *coarse-textured* soils, do not apply more than two weeks prior to planting.

If weeds are present at the time of treatment, apply in tank mix combination with a contact herbicide (for example, paraquat [Gramoxone Inteon®] or glyphosate [Makaze®]). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

**Note:** To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**Preplant Incorporated (Broadleaf and grass control):** Broadcast in spring after plowing, at rate in Table 1A. Apply to the soil and incorporate before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

**Preemergence or At-planting (Broadleaf and grass control):** Apply during or shortly after planting before weed emergence, at rate in Table 1A.

**Postemergence (Broadleaf and grass control):** Apply before weeds are 1.5 inches tall and before corn reaches 12 inches tall, at rate in Table 1B. When using nitrogen solutions, direct the spray to avoid corn foliage injury.

#### TABLE 1: ATRAZINE 90 WDG HERBICIDE RATES FOR BROADLEAF AND GRASS CONTROL IN CORN

#### A. FOR ALL SOIL APPLICATIONS PRIOR TO CORN EMERGENCE

(including early preplant, preplant incorporated, preplant surface, at planting or preemergence)

Soil Erodibility Classification*	Plant Residue Amount	Maximum Rate/Acre <sup>1</sup>
Highly erodible	30% or more	2.2 lbs Atrazine 90 WDG Herbicide
_	(conservation tillage program)	
	Less than 30%	1.77 lbs Atrazine 90 WDG Herbicide
	(conventional tillage program)	
Not highly erodible	No limit	2.2 lbs Atrazine 90 WDG Herbicide

<sup>\*</sup>As defined by the Natural Resource Conservation Service

#### **B. FOR CORN POSTEMERGENCE APPLICATION**

Previous Soil Application Of Atrazine To Crop	Total Maximum Rate/Acre/Calendar Year
No	2.2 lbs this product postemergence
Yes	2.77 lbs this product combined from soil and
	postemergence applications

Postemergence applications to corn must be made before corn reaches 12 inches in height.

<sup>1</sup>Broadleaf control (eastern CO, western KS, western NE, NM, OK Pan Handle, west TX, and eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 1.3 pounds this product per acre, either preplant surface, preplant incorporated, or preemergence. On other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

**Postemergence with emulsifiable oil or oil concentrate in water:** Add the following volume of one of the type oils indicated for ground application unless the oil label specifies otherwise:

Type Oil	Ground Application
Oil concentrate (Crop or Petroleum-derived)	1.0 gt/acre
Petroleum-derived oil	1.0 gal/acre

**Note:** Crop-derived or petroleum-derived oil concentrates should contain at least 1% but not more than 20% suitable emulsifier or surfactant blend. Petroleum-derived oils should contain at least 1% suitable emulsifier.

**Broadleaf and grass control:** For postemergence control of those weeds listed under **Preplant Incorporated and Preemergence**, broadcast 2.2 pounds this product per acre plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn is 12 inches tall.

**Broadleaf control:** For postemergence control of those weeds listed under **Postemergence with emulsifiable oil or oil concentrate in water**, broadcast 1.3 pounds this product per acre plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 6 inches in height, before all other weeds reach 4 inches in height and before corn is 12 inches tall. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

#### Use precautions for applications with emulsifiable oil or oil concentrate in water:

- 1. Inbred lines or any breeding stock may be severely injured by applications with emulsifiable oil or oil concentrate.
- 2. Adding other insecticides, herbicides, liquid fertilizers, or other materials is not recommended, because they may cause compatibility problems or crop injury.
- 3. Store and handle emulsifiable oil and oil concentrate carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank. To avoid crop injury,
- 4. Do not apply when crop is under stress from prolonged cold, wet weather, poor fertility, or other factors, or when crop is wet and succulent from recent rainfall.
- 5. Do not make more than one application per season.

#### TANK MIXTURES FOR CORN

This product may be tank mixed with other herbicides for control of certain broadleaf and grass weeds in corn: Use tank mix directions appearing on the labels of other herbicides when tank mixing with this product. Observe all precautions and limitations on labeling of products used in a particular tank mix.

#### Atrazine 90 WDG Herbicide + Simazine 4L or Simazine 90DF

Use a tank mixture of Atrazine 90 WDG Herbicide + simazine for the control of crabgrass, fall panicum and carpetweed in addition to the control of the weeds listed for Atrazine 90 WDG Herbicide alone.

Make broadcast application of tank mix before planting, at planting, or after planting, but prior to emergence of corn and weeds. Cultivate shallowly if weeds develop.

**PREPLANT SURFACE-APPLIED:** Use on medium- and fine-textured soils in minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, and WY. Apply up to 30 days before planting. Applications made less than 30 days before planting may be made as either a split or single treatment. On coarse-textured soils, do not apply more than two weeks before planting.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, paraquat [Gramoxone Inteon] or glyphosate [Makaze]). All applicable directions, use precautions and limitations on the contact herbicides' labels must be followed.

**Note:** To the extent possible do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**PREPLANT INCORPORATED:** Make soil application and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks before planting.

**PREEMERGENCE:** Apply during or shortly after planting, but prior to crop and weed emergence. All applicable directions, use precautions, and limitations on this and the simazine label must be followed.

When tank mixing or sequentially applying simazine and/or atrazine or products containing either active ingredient to corn, the total pounds of simazine and/or atrazine applied must not exceed 2.5 pounds active ingredient per acre per calendar year.

#### Atrazine 90 WDG Herbicide + Simazine 4L, or Simazine 90DF with glyphosate (Makaze)

Use a tank mixture of Atrazine 90 WDG Herbicide + simazine + glyphosate for control of certain broadleaf weeds and grasses where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Refer to glyphosate label for rates and tank mix directions. All applicable directions, limitations, and use precautions on this, the simazine, and the glyphosate label must be followed.

#### Atrazine 90 WDG Herbicide + Simazine 4L, or Simazine 90DF with paraguat (Gramoxone Inteon)

Use a tank mixture of Atrazine 90 WDG Herbicide + simazine + paraquat to control most emerged weeds and for residual weed control where corn will be planted directly into a cover crop, established sod or in previous crop residues. Add Atrazine 90 WDG Herbicide and simazine to water in spray tank. Agitate until thoroughly mixed. Next add paraquat and a nonionic surfactant, such as Loveland Activator 90, or similar nonionic surfactant approved for agricultural use.

Continue agitation during application. Apply 1.1 pounds of Atrazine 90 WDG Herbicide plus 2.0 pints Simazine 4L, or 1 1/10 pounds Simazine 90DF plus the specified rate of paraquat in 20.0 to 60.0 gallons of water per sprayed acre. Make broadcast application before, during, or after planting, but before emergence of corn. Add 1/2 pint of a nonionic surfactant per 100 gallons of spray mixture. Use the higher rate of paraquat if existing weeds are 4 to 6 inches tall. Weeds taller than 6 inches will not be controlled.

All applicable directions, limitations, and use precautions on this, the simazine and the paraquat labels must be followed.

#### Atrazine 90 WDG Herbicide + paraquat (Gramoxone Inteon)

For control of existing vegetation and residual control where corn will be planted directly into cover crop, established sod or in previous crop residues - Broadcast 2.2 pounds Atrazine 90 WDG Herbicide and specified label rate of paraquat in 20.0 to 60.0 gallons of water per sprayed acre. Following the paraquat label, add specified rate of

nonionic surfactant per 100 gallons of diluted spray. Add Atrazine 90 WDG Herbicide to spray tank first and thoroughly mix with water. Add the paraquat and surfactant last.

Refer to the paraguat label for further directions, limitations and cautions.

#### Atrazine 90 WDG Herbicide + alachlor (Micro-Tech®)

Use a tank mixture of Atrazine 90 WDG Herbicide + alachlor for the control of most annual broadleaf and grass weeds in corn (field and silage corn only) such as annual morningglory, barnyardgrass, black nightshade, brachiaria, buttonweed (velvetleaf), carpetweed, cocklebur, crabgrass, fall panicum, Florida pusley, giant foxtail, green foxtail, yellow foxtail, goosegrass, lambsquarters, pigweed, purslane, mustard, common ragweed, smartweed and witchgrass.

Applications may be made preplant, within 7 days of planting; preemergence, or postemergence, until weeds reach the two leaf stage and the corn is not more than 5 inches tall.

Refer to the alachlor label for application rates and directions. Applicable limitations and use precautions on this and the alachlor label must also be followed.

### Atrazine 90 WDG Herbicide + alachlor (Micro-Tech) + paraquat (Gramoxone Inteon) or glyphosate (Makaze) For Minimum-Tillage or No-Tillage Systems

For control of many emerged annual weeds, suppression of many emerged perennial weeds, and preemergence control of many annual grasses and weeds in areas where corn will be planted directly into a cover crop, established sod or in previous crop residues. Regrowth from perennial weeds will not be controlled. Do not apply by air. Make application immediately before, during, or after planting, but before crop emergence. Refer to the alachlor label for application rates and directions. All applicable directions, limitations, and use precautions on this and the alachlor and paraguat or glyphosate labels must be followed.

### Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM®) or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM) + simazine

#### PREPLANT/PREEMERGENCE

Use a tank mixture of Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor + simazine as a preplant surface, preplant incorporated or preemergence application for the control of barnyardgrass, crabgrass, crowfootgrass, fall panicum, foxtail millet, giant foxtail, goosegrass, green foxtail, prairie cupgrass, red rice, signalgrass (*Brachiaria*), southwestern cupgrass, witchgrass, yellow foxtail, yellow nutsedge, black nightshade, carpetweed, Florida pusley, galinsoga, pigweed, browntop panicum, cocklebur, common purslane, hairy nightshade, lambsquarters, morningglory, ragweed, smartweed, and velvetleaf in corn. To apply, refer to the tank mix directions appearing on the metolachlor/S-metolachlor label. Note, where directions specify AAtrex® Nine-O®, substitute Atrazine 90 WDG Herbicide. All applicable directions, limitations, and use precautions on this and the metolachlor/S-metolachlor and simazine labels must be followed.

#### **POSTEMERGENCE**

Use a tank mixture of Atrazine 90 WDG Herbicide plus metolachlor/S-metolachlor as a postemergence application for the control of barnyardgrass, crabgrass, crowfootgrass, fall panicum, foxtail (giant, green and yellow), jimsonweed, mustard, pigweed, prickly sida, purslane, ragweed, smartweed, and velvetleaf and for partial control of cocklebur, morningglory, and yellow nutsedge. To apply, follow the tank mix directions appearing on the metolachlor/S-metolachlor label. Note, where directions specify AAtrex Nine-O, substitute Atrazine 90 WDG Herbicide. All applicable directions, limitations, and precautions on the metolachlor/S-metolachlor label must be followed.

Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM) + paraquat (Gramoxone Inteon) or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM) + glyphosate (Makaze) or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM) + simazine + paraquat (Gramoxone Inteon) or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor (Dual II MAGNUM) + simazine + glyphosate (Makaze).

#### For Minimum-Tillage or No-Tillage Systems

Use a tank mixture of Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor with paraquat or glyphosate, or Atrazine 90 WDG Herbicide + metolachlor/S-metolachlor + simazine with paraquat or glyphosate in minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues.

The paraquat tank mixtures will control most emerged annual weeds and suppress many perennial weeds, in addition to controlling most preemergence annual broadleaf weeds and grasses. The glyphosate tank mixtures will control emerged annual and perennial weeds, in addition to controlling most preemergence annual broadleaf weeds and grasses. Make application before, during, or after planting but before the corn emerges. To apply, follow the tank mix directions appearing on the metolachlor/S-metolachlor label. Note, where directions specify AAtrex Nine-O, substitute Atrazine 90 WDG Herbicide. All application directions, limitations, and use precautions on this and the metolachlor/S-metolachlor, simazine, paraquat and glyphosate labels must be followed.

#### USE RESTRICTIONS FOR ALL APPLICATIONS TO CORN AND SORGHUM

- 1. Do not exceed an application rate of 2.0 pounds active ingredient of atrazine per acre for any single application, and the total pounds of atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre per year.
- 2. Do not apply product 60 days prior to harvest for field corn forage and preemergent sorghum forage.
- 3. Do not apply product 45 days prior to harvest for sweet corn forage and postemergent sorghum.
- 4. Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in the fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of the rate used.
- 5. Do not graze treated area or feed treated forage to livestock for 21 days following application.
- 6. For postemergence applications plus emulsifiable oil, see additional use precautions under that section of this label.
- 7. Postemergence application to corn and sorghum must be made before crop reaches 12 inches in height.

### SORGHUM AND SORGHUM-SUDAN HYBRIDS (GRAIN AND FORAGE TYPES):

Postemergence applications to sorghum must be made before sorghum reaches 12 inches in height.

Atrazine 90 WDG Herbicide may be applied before planting, at planting or after planting, subject to maximum rate limitations.

Use only on medium- and fine-textured soils having a minimum of 1% organic matter, except as separately specified for furrow-irrigated bedded sorghum grown in Arizona and California.

**Preplant Surface-Applied (Broadleaf and grass control):** Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, and WY. Apply 2/3 the specified rate of Atrazine 90 WDG Herbicide shown in Table 3 for the soil texture as a split treatment 30 to 45 days prior to planting and the remainder at planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. Under dry conditions, irrigation after application is recommended to move Atrazine 90 WDG Herbicide into the soil.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, paraquat [Gramoxone Inteon] or glyphosate [Makaze]). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

**Note:** To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**Preplant Incorporated (Broadleaf and grass control):** Broadcast in spring after plowing at rate shown in Table 3. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after applications, avoid deep incorporation. For best results, apply within two weeks prior to planting.

**Preemergence or At-planting (Broadleaf and grass control):** Apply during or shortly after planting, but prior to weed or crop emergence at rate shown in Table 3.

#### TABLE 3: ATRAZINE 90 WDG HERBICIDE RATES FOR BROADLEAF AND GRASS CONTROL IN SORGHUM.

**FOR ALL SOIL APPLICATIONS PRIOR TO SORGHUM EMERGENCE** (including early preplant, preplant incorporated, preplant surface, at planting or preemergence)

Soil Erodibility Classification*	Plant Residue Amount	Maximum Rate/Acre <sup>1</sup>
Highly erodible	30% or more	2.2 lbs Atrazine 90 WDG Herbicide
	(conservation tillage program)	
	Less than 30%	1.77 lbs Atrazine 90 WDG Herbicide
	(conventional tillage program)	
Not highly erodible	No limit	2.2 lbs Atrazine 90 WDG Herbicide

<sup>\*</sup> As defined by the Natural Resource Conservation Service

<sup>1</sup>Do not apply preplant surface or preplant incorporated in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, or TX. Do not apply preemergence in NM, OK, or TX, except in northeast OK and the TX Gulf Coast. In case of planting failure, sorghum or corn may be replanted. Do not make a second broadcast application, or injury may occur. If originally applied in a band and sorghum or corn is replanted in untreated row middles, this product may be applied in a band to the second planting provided the maximum application rate of 2.5 pounds active ingredient of this product per acre atrazine per calendar year is not exceeded.

Preemergence broadleaf weed control in furrow irrigated bedded sorghum (AZ and CA only): For preemergence control of many broadleaf weeds, broadcast 0.9 to 1.3 pounds of this product per acre after bed preparation, during or after planting, but before sorghum and weeds emerge and before the first furrow irrigation. Follow with several regular irrigations, making sure to thoroughly wet all soil.

**Use precautions for preemergence application to furrow irrigated bedded sorghum in AZ and CA:** To avoid possible sorghum injury, do not use on sand or loamy sand soil or on sorghum planted in furrows. Applications to sorghum growing on alkali soils or where cuts, fills, or erosion have exposed calcareous or alkali subsoils may cause crop injury. In case of crop failure, do not replant sorghum for 8 months following application. Corn may be planted immediately.

**Postemergence (Broadleaf and grass control):** Apply at rate shown in Table 4 before weeds exceed 1.5 inches in height. Applications may be made before crop height of 12 inches.

TABLE 4: ATRAZINE 90 WDG HERBICIDE RATES FOR BROADLEAF AND GRASS CONTROL IN SORGHUM.

FOR SORGHUM POSTEMERGENCE APPLICATION		
Previous Soil Application Of Atrazine To Crop Total Maximum Rate/Acre/Calendar Year		
No	2.2 lbs postemergence	
Yes	2.77 lbs combined from soil and postemergence applications	
	applications	

Postemergence applications to sorghum must be made before sorghum exceeds 12 inches in height.

Postemergence broadleaf weed control with emulsifiable oil or oil concentrate in water: Broadcast 1.3 pounds this product per acre for control of many broadleaf weeds. Apply before pigweed and lambsquarters reach 6 inches in height, before all other weeds reach 4 inches in height and before sorghum is 12 inches tall. In CO, western KS, NM, OK, TX, and desert regions of AZ and CA, apply when sorghum is about 6 to 10 inches in height, but before sorghum is 12 inches tall. In all other areas, apply after sorghum reaches the 3-leaf stage and before sorghum is 12 inches tall. Add 1.0 gallon of emulsifiable oil per acre for ground application or add 1.0 guart of oil concentrate

for ground application. A cultivation may be necessary if all weeds are not controlled or if weeds regrow. For the list of weeds controlled, see Atrazine 90 WDG Herbicide Applied Alone-Corn or Grain Sorghum-Postemergence with Emulsifiable Oil or Oil Concentrate in Water.

**Use precautions for applications with emulsifiable oil or oil concentrate in water:** See "Use precautions for applications with emulsifiable oil or oil concentrate in water" in Corn section.

Postemergence broadleaf weed control with surfactant (CO, western KS, NM, OK, TX, and desert regions of AZ and CA only): Broadcast 1.3 pounds this product per acre plus 0.75 to 1.5 pints of surfactant when sorghum is 6 up to 12 inches in height, but before weeds exceed 1.5 inches in height. Apply only on sandy loam and finer textured soil.

#### Use precautions for all applications to sorghum:

- 1. Heavy rain immediately following application tends to cause excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Do not apply to furrow-planted sorghum until furrows are leveled (plowed in). Level deep planter marks or seed furrows before application.
- 2. Application to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soil may result in crop injury.
- 3. Following harvest, plow (moldboard or disk-plow) and thoroughly till soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of rate used.
- 4. Injury may occur if both this herbicide, preplant surface, preplant incorporated, or preemergence, and an atplanting systemic insecticide applied in-furrow are used.
- 5. Do not apply more than 2.2 to 2.77 pounds of this product per acre per calendar year (See MAXIMUM RATES section of label).
- 6. For all soil applications prior to crop emergence (except for preemergence use on bedded sorghum in AZ and CA), do not apply to coarse-textured soils, i.e., sand, loamy sand, sandy loam, or to medium- and fine-textured soils having less than 1% organic matter, or injury may occur.
- 7. For postemergence applications, do not apply to sand or loamy sand, or injury may occur.

**Note:** Do not graze or feed forage from treated areas for 21 days following application, or illegal residues may result.

#### TANK MIXTURES FOR GRAIN SORGHUM

**Metolachlor/S-metolachlor (Dual MAGNUM®):** Use as tank mixture with metolachlor/S-metolachlor for control of those weeds listed on the metolachlor/S-metolachlor label, as well as on this label. Use this tank mixture only on sorghum seed treated with Concep®. Refer to the metolachlor/S-metolachlor label for all directions, precautions, and limitations.

#### WINTER WEED CONTROL IN TEXAS

For postemergence control of winter weeds only, such as henbit, seedling dock, and annual thistle on fall bedded land in the Gulf Coast and Blacklands of Texas. Apply 0.9 to 1.1 pounds of this product per acre postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum, or forage sorghum the following spring. For best results add a suitable surfactant at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1.0% of the spray volume, or an oil concentrate at the rate of 1.0 quart per acre. Normal weed control programs may be used in the following corn, grain sorghum or forage sorghum crop.

**Note:** Do not plant any crops except corn, grain sorghum, or forage sorghum the spring following this treatment, or illegal residues may result.

#### ATRAZINE 90 WDG HERBICIDE ALONE-CHEMICAL FALLOW

Wheat-Sorghum-Fallow: To control annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage, broadcast 2.5 pounds this product per acre to wheat stubble immediately following wheat harvest. If weeds are present at application, remove them with a sweep plow or other suitable implement after application, or use an approved contact herbicide before or after the application of

Atrazine 90 WDG Herbicide. Plant sorghum into wheat stubble the following spring with minimum soil disturbance. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

For the list of weeds controlled, see **Atrazine 90 WDG Herbicide Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied**, **Preplant Incorporated**, **or Preemergence**.

#### **Use precautions:**

- 1. Use only on silt loam or finer textured soil, or crop injury may result.
- 2. Wheat-sorghum-fallow cropping sequence must be followed.
- 3. Do not apply following sorghum harvest.

**Notes:** To avoid illegal residues, do not graze or feed forage from treated area to livestock. To avoid illegal residues and crop injury, do not plant any crop other than those on this label within 18 months following treatment.

Wheat-Corn-Fallow (KS, NE): This product controls cheatgrass (downy brome, chess), kochia\*, mustards, pigweed\*, Russian thistle, wild lettuce, wild sunflower, and volunteer wheat during period after wheat harvest. Weed control may extend into following corn crop grown under minimum tillage.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

Follow directions for use, notes, and use precautions in the "Wheat-Sorghum-Fallow" section above, substituting corn for references to sorghum.

Wheat-Fallow-Wheat (CO, KS, MT, NE, ND, SD, and WY): For preemergence control of cheatgrass (downy brome, chess), common lambsquarters\*, field pennycress, kochia\*, mustard, Russian thistle, wild lettuce, and suppression of volunteer wheat during fallow period of a wheat-fallow-wheat rotation, broadcast 0.5 to 1.1 pounds of this product per acre on all soils except those listed under "Use Precautions." For control of pigweed and wild sunflower, use the higher rate. Apply to stubble ground. Treat only once during same fallow period.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

#### TANK MIXTURES FOR CHEMICAL FALLOW

#### Wheat-Sorghum-Fallow or Wheat-Corn-Fallow (KS, NE)

**Paraquat (Gramoxone Inteon):** If weeds are present at application, a tank mix with paraquat may be used. Broadcast 2.5 pounds of Atrazine 90 WDG Herbicide plus specified label rate of paraquat in 20.0 to 60.0 gallons of water per acre by ground equipment. Add 0.5 to 1.0 pint of nonionic surfactant per 100 gallons of spray mixture. Add Atrazine 90 WDG Herbicide to spray tank first and thoroughly mix with water. Then add paraquat, followed by surfactant. Use the higher rate of paraquat if weeds are 4 to 6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions, precautions, and limitations.

#### Wheat-Fallow-Wheat (CO, KS, MT, NE, ND, SD, and WY)

**Paraquat (Gramoxone Inteon):** If weeds are present at application, a tank mix with paraquat may be used. Broadcast 0.5 to 1.1 pounds of Atrazine 90 WDG Herbicide plus specified label rate of paraquat in 20.0 to 60.0 gallons of water per acre by ground equipment. Add 0.5 to 1.0 pint of a nonionic surfactant per 100 gallons of spray mixture. Add Atrazine 90 WDG Herbicide spray tank first and thoroughly mix with water. Then add paraquat, followed by surfactant. Use the higher rate of paraquat if weeds are 4 to 6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions, precautions, and limitations.

If weeds are present at application and this product is used alone, use either an approved contact herbicide before or after treatment, or tillage after treatment.

Use tillage to control weeds which escape during fallow period. Till before planting. For this product applied alone or in tank mixture with paraguat, plant at least 2 inches deep and 12 months or more after application.

#### **Use precautions:** *To avoid crop injury:*

- 1. Do not use on sand soil.
- 2. Do not treat eroded hillsides, caliche and rocky outcroppings, or exposed calcareous subsoil.
- 3. Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY.
- 4. Do not treat soils with calcareous surface layers.
- 5. Avoid spray overlap.

**Note:** Do not graze treated areas within 6 months after application or illegal residues may result.

#### **CHEMICAL FALLOW USE RESTRICTIONS**

#### For soils in North and South Dakota with a pH of 7.5 or greater:

 Do not apply more than 1.5 pounds active ingredient per acre for any application. Do not apply more than one application per cycle.

#### For soils in North and South Dakota with a pH of less than 7.5:

• Do not apply more than 2.0 pounds active ingredient per acre for any application. Do not apply more than one application per cycle.

#### For all other locations:

• Do not apply more than 2.25 pounds active ingredient per acre for any application. Do not apply more than one application per cycle.

#### **ROADSIDES**

To control certain annual weeds in established perennial grasses along roadsides in CO, KS, MT, NE, ND, SD, and WY, including cheatgrass (downy brome, chess), common (annual) broomweed, little barley, medusahead, sagewort, and tumble mustard, broadcast 1.1 pounds of this product per acre in a minimum of 10.0 gallons of water by ground equipment in the fall before ground freezes, or after thawing in the spring, but before the established grasses green-up and before weeds emerge. Examples of desirable established grasses include big bluestem, bluegrama, bromegrass, buffalograss, crested wheatgrass, Indiangrass, little bluestem, side-oats grama, switchgrass, and Western wheatgrass. Apply only once per year. Temporary discoloration or other form of injury to the desirable perennial grasses may occur following application.

#### **Restrictions:**

- 1. Do not apply more than 1.0 pound active ingredient per acre for any application.
- 2. Do not apply more than 1 application per year.
- 3. Do not cut or feed roadside grass hay.
- 4. Do not allow livestock to graze treated areas.

#### **SUGARCANE**

For control of many broadleaf and grass weeds, including amaranths\*, crabgrass, fireweed, flora's paintbrush, fox-tails\*, junglerice\* and wiregrass, broadcast 2.2 to 4.4 pounds of Atrazine 90 WDG Herbicide at time of planting or ratooning, but before sugarcane emerges. Broadcast or band by ground equipment in a minimum of 20.0 gallons per acre, unless indicated otherwise. One additional application may be made over the sugarcane as it emerges, and two additional applications may be made interline after emergence as directed sprays. Repeat treatments, where needed, may be applied broadcast, band, or interline as suggested with the final application being prior to close-in. Do not exceed the rate of herbicide suggested for any one crop of sugarcane.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

#### Use precautions for all states:

- 1. Do not apply more than 4.0 pounds active ingredient per acre for any application.
- 2. Do not apply more than 10.0 pounds active ingredient per acre per crop.

**Note:** Where high rates of Atrazine 90 WDG Herbicide are used, apply in a minimum of 1.0 gallon of water for each 1.0 pound of product applied per acre.

#### Florida

For control of emerged pellitory weed: Apply 0.4 to 0.6 pound of this product per acre in at least 40.0 gallons of water as a directed spray by ground equipment prior to close-in. Add 4.0 quarts of surfactant for each 100 gallons of spray. Thoroughly cover weed foliage.

For control of alexandergrass\*, large crabgrass, pellitory (artillery) weed, and spiny amaranth\*, use one of the following methods at planting or rationing:

- 1. Apply 4.4 pounds of this product per acre preemergence. Follow with one or two applications, as needed, postemergence to sugarcane and weeds at 2.2 pounds this product per acre. Treat before weeds exceed 1.5 inches in height.
- 2. Apply 1 to 3 times, as needed, at 2.2 pounds this product per acre postemergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

#### Louisiana

For control of annual weeds during the summer fallow period, apply 2.2 pounds of this product per acre to weed-free beds immediately after bed formations. Follow normal weed control program after planting.

#### Texas

Use Atrazine 90 WDG Herbicide for control of barnyardgrass\*, pigweed\*, purslane and sunflower, in plant or ration sugarcane.

Apply 4.4 pounds per acre of Atrazine 90 WDG Herbicide preemergence. Follow with one or two applications, as needed, at 3.3 pounds per acre postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant at a concentration of 2.0 quarts per 100 gallons to the spray and apply before weeds exceed 1.5 inches in height.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

#### Use precautions:

- 1. Injury to sugarcane may occur when under moisture stress, when soil is of low absorptive capacity, or when land is first cropped to sugarcane.
- 2. Do not apply after close-in.
- 3. Do not apply more than 11.0 pounds per acre to any one crop of sugarcane, or crop injury may result.

#### **TURFGRASSES FOR SOD**

#### St. Augustinegrass, Centipedegrass, and Zoysia Grass

Broadcast 2.2 to 4.4 pounds of this product per acre according to soil texture to control those weeds listed under Atrazine 90 WDG Herbicide Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

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Muck	4.4 lbs	Old beds: Within 2 days after lifting sod
or peat	product	New beds: 3 to 4 days after sprigging or plugging
Sandy	2.2 lbs	Old beds: Within 2 days after lifting sod

If weeds regrow, apply an additional 2.2 pounds per acre on muck or peat, or 1.1 pounds per acre on sandy soil.

#### **Use precautions:** To avoid crop injury:

- 1. Do not apply within 30 days prior to cutting or lifting.
- 2. Do not apply in combination with surfactants or other spray additives.
- 3. Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases.

- 4. For muck or peat soils, do not apply more than 4.0 pounds active ingredient per acre for any application, do not apply more than 6.0 pounds active ingredient per year.
- 5. For sandy soil, do not apply more than 2.0 pounds active ingredient per acre for any application, do not apply more than 3.0 pounds active ingredient per year.
- 6. On newly sprigged turfgrass, temporary slowing of growth may follow application.

### TURFGRASS at Residential sites (including homes, daycare facilities, schools, playgrounds, parks, recreational areas, and sports fields).

#### Bermudagrass, Centipedegrass, St. Augustinegrass, and Zoysia Grass

Apply Atrazine 90 WDG Herbicide after October 1 before emergence of winter annual weeds for control of annual blugrass\*, burclover, carpet burweed, chickweed, corn speedwell, henbit, hop clover, and spurweed. Atrazine 90 WDG Herbicide will control annual bluegrass even if it is emerged at time of treatment. For control of summer annual weeds listed in the preemergence portion of the Atrazine 90 WDG Herbicide Applied Alone-Corn or Grain Sorghum section of this label, also apply Atrazine 90 WDG Herbicide in late winter before the weeds emerge. Apply in a minimum of 15.0 gallons of water per acre or 1.0 gallon per 1,000 square feet.

Where annual bluegrass is the major weed, use 1.1 pounds of Atrazine 90 WDG Herbicide per acre (0.4 ounce per 1,000 square feet). Use 1.1 pounds of this product (0.4 ounce per 1,000 square feet) for control of the other weeds named above. Do not exceed 1.1 pounds per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Tiflawn, Tifway, and Ormond.

On newly sprigged turfgrass and hybrid bermudagrass, temporary slowing of growth and yellowing may occur following application. To avoid turf injury.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

For continued summer annual weed control, apply another 1.1 pounds of this product per acre at least 30 days after the previous application, but not after April 15. However, do not make more than two applications of this product per year.

#### **Use Restrictions:**

- 1. Do not apply more than 1.0 pound active ingredient per acre for any application, do not apply more than 2.0 pounds active ingredient per acre per year.
- 2. Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases.
- 3. Do not use on golf greens.
- 4. Do not use north of NC (except may be used in Virginia Coastal Plains) or west of the high rainfall areas of eastern OK and eastern TX.
- 5. Do not apply over the rooting area of trees or ornamentals not listed on this label.
- 6. Do not overseed with desirable turfgrass within 4 months before or 6 months after treatment.
- 7. Do not apply this product to newly seeded bermudagrass until it has overwintered and has a well-developed rhizome system. Do not exceed 2.0 pounds product per acre within 12 months of seeding bermudagrass.

**Note:** Do not graze or feed turf clippings to animals, or illegal residues may result.

#### **MACADAMIA NUTS**

For preemergence control of many broadleaf and grass weeds, including crabgrass, foxtail\*, wiregrass, flora's paintbrush, spanishneedles, and fireweed, broadcast 2.2 to 4.4 pounds of this product per acre before harvest and before weeds emerge. Repeat as necessary. Do not spray when nuts are on ground during harvest period. Do not apply by air.

Do not apply more than 4.0 pounds active ingredient per acre for any application. Do not apply more than 8.0 pounds active ingredient per year.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

#### **GUAVA**

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 2.2 to 4.4 pounds per acre of Atrazine 90 WDG Herbicide in 20.0 to 50.0 gallons of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80.0 to 100 gallons of spray mix per acre) may enhance weed control. This product controls many annual broadleaf and grass weeds, including fireweed, purslane, scarlet pimpernel, spanishneedles, and sowthistle.

#### **Notes:** To avoid illegal residues:

- 1. Do not allow spray to contact foliage or fruit.
- 2. Do not apply more frequently than at 4 month intervals.
- 3. Do not apply more than 4.0 pounds active ingredient per acre for any application.
- 4. Do not apply more than 8.0 pounds active ingredient per year.

#### CONIFERS

For control of annual broadleaf and grass weeds prior to transplanting, after transplanting or in established conifers (including Douglas fir, grand fir, noble fir, white fir, Austrian pine, bishop pine, Jeffrey pine, knobcone pine, lobloly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce, and Sitka spruce): Broadcast 2.2 to 4.4 pounds of this product in a minimum of 5.0 gallons of water per acre by air or 10.0 gallons by ground before weeds are 1.5 inches tall.

Apply to established trees between fall and early spring while trees are dormant. For new transplants, apply during or soon after transplanting. For applications prior to transplanting, allow sufficient precipitation to activate Atrazine 90 WDG Herbicide before transplanting. In areas where spring and summer rainfall is inadequate to activate Atrazine 90 WDG Herbicide, apply during fall prior to spring transplanting.

For the list of weeds controlled, see Atrazine 90 WDG Herbicide Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

**Quackgrass\* control:** Broadcast 4.4 pounds this product in a minimum of 5.0 gallons of water per acre by air or 10.0 gallons by ground between fall and early spring while trees are dormant and before quackgrass is more than 1.5 inches tall.

\*(Local resistance may result in suppression only or lack of control. Refer to IMPORTANT NOTE within PRODUCT INFORMATION SECTION of this label.)

#### Use precautions:

- 1. In areas west of the Rocky Mountains (except the Great Basin), grazing may begin 7 months after a fall application or 3 months after a winter or spring application.
- 2. To prevent illegal residues, do not graze treated areas of the Great Basin, or areas east of the Rocky Mountains.
- 3. Temporary injury to trees may occur following use of Atrazine 90 WDG Herbicide on coarse-textured soil.
- 4. To avoid crop injury, do not apply to seedbeds.
- 5. Also apply only once per year.
- 6. Do not apply more than 4.0 pounds active ingredient per acre for any application.
- 7. Do not apply more than 4.0 pounds active ingredient per year.

**Conifer Tank Mixes-Reforestation Areas:** Atrazine 90 WDG Herbicide may be tank mixed with other herbicides, such as certain 2,4-D formulations, labeled for conifer site preparation and dormant conifer over-the-top applications. Users should carefully follow all label directions and precautions for each product, and obtain local use information from regional, state or university extension foresters, or similar reliable sources. The risk of conifer injury from tank mixes is generally unacceptable for Christmas trees and ornamentals. IMPORTANT: tank mixes may increase potential for damage to conifers. Use only where the risk of damage can be tolerated. New combinations should be evaluated in limited tests before large scale use. Read Notice for limit of manufacturer's warranty.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in safe manner. Store in original container only. Store in cool, dry place. Reduce stacking height where local conditions, such as humidity or pallet overhang, can affect package strength. Personnel should use clothing and equipment consistent with good pesticide handling.

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

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS. INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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