

34704-622

12/2/2004

Page 189



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 2 2004

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms. Glenda Haage
Loveland Products, Inc.
7251 W 4th Street
PO Box 1286
Greeley, CO 80632-1286

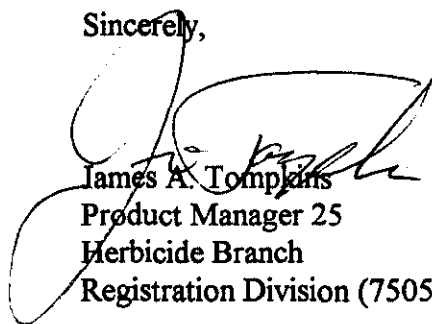
Dear Ms. Haage:

Subject: Atrazine 90 WDG
EPA Registration Number 34704-622
Resubmission dated November 30, 2004
Amended label per Atrazine MOA

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records. Submit one (1) copy of final printed labeling before you release the product for shipment.

If you have any questions, contact Hope Johnson at 703-305-5410.

Sincerely,



James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

279

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-triazine)	88.5%
Related compounds	1.8%
INERT INGREDIENTS	9.7%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

See Below For Additional Precautionary Statements.

EPA REG. NO. 34704-622

EPA EST. NO. 100-LA-1

NET WEIGHT 25 LBS. (11.34 KG)

IHT

EXP 11P04

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

FIRST AID

If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:
1-800-301-7976.

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.

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 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 ft. 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.

ACCEPTED

in EPA Letter Dated

DEC 2 2004

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

34704-622

ATRAZINE 90 WDG EPA REG. NO. 34704-622

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-outletted fields containing standpipes:

- Do not apply within 66 feet of standpipes in tile-outletted fields.
- Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2-3 inches in the entire field.
- Apply this product to the entire tile-outletted 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, chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber or Viton, and chemical-resistant footwear plus socks.

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 treated area until sprays have dried.

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: Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL 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 gals. of spray mixture/A 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 35-40 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 gals./minute/100 gal. tank size circulated through a correctly positioned sparger tube or jets.

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:
$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate} = \text{amount needed per acre of field}$$

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 fertilizer as serious

4 8 9

ATRAZINE 90 WDG
EPA REG. NO. 34704-622

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 gals. per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
2. To one of the jars add ¼ tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex ®, E-Z Mix, or Unite ® (¼ tsp. is equivalent to 2 pts. per 100 gals. 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 ½ of the compatibility agent to the fertilizer and the other ½ 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 ¼ 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, 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 (lbs a.i. 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 (lbs ai/A) 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 lbs./A or equivalent band application rate, as soybean injury may occur.
- 5) Injury may occur to soybeans planted in north-central and northwest IA, south-central and southwest MN, northeast 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 lbs./A with Oil)

Broadleaf and Grass Weeds Controlled

Barnyardgrass** (watergrass)	cocklebur*	nightshade*
giant foxtail**	groundcherry	pigweed*
green foxtail**	jimsonweed	purslane
large (hairy) crabgrass*	kochia*	ragweed
wild oats	lambsquarter*	sicklepod
witchgrass**	annual*	velvetleaf**
(Panicum capillare)	morningglory	(buttonweed)
yellow foxtail*	mustards	

Postemergence with Emulsifiable Oil or Oil concentrate in Water (at 1.3 lbs./A)

Broadleaf Weeds Controlled

annual morningglory	lambsquarter*	ragweed
cocklebur*	mustards	smartweed
jimsonweed	pigweed*	wild buckwheat
		velvetleaf*

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

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

** Suppression or partial control only on medium and fine textured soils.

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 Per Acre
Highly erodible	30% or more (conservation tillage program)	2 lbs. active ingredient
	Less than 30% (conventional tillage program)	1.6 lbs. active ingredient
Not highly erodible	No limit	2 lbs. active ingredient

*As defined by the Natural Resource Conservation Service

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 Per Acre Per Calendar Year
No	2 lbs. active ingredient postemergence
Yes	2.5 lbs. active ingredient combined from soil and postemergence applications.

ATRAZINE 90 WDG HERBICIDE contains 0.9 lb. active ingredient per 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 recommended 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 or glyphosate). 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.

ATRAZINE 90 WDG
EPA REG. NO. 34704-622

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 Per Acre ¹
Highly erodible	30% or more (conservation tillage program)	2.2 lbs. Atrazine 90 WDG
	Less than 30% (conventional tillage program)	1.77 lbs. Atrazine 90 WDG
Not highly erodible	No limit	2.2 lbs. Atrazine 90 WDG

*As defined by the Natural Resource Conservation Service

B. FOR CORN POSTEMERGENCE APPLICATION

Previous Soil Application Of Atrazine To Crop	Total Maximum Rate Per Acre Per 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.

¹**Broadleaf control (eastern CO, western KS, western NE, NM, OK Pan Handle, west TX, and eastern WV):** On sand, loamy sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 1.3 lbs. 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 aerial or ground application unless the oil label specifies otherwise:

Type Oil	Ground Application
Oil concentrate (Crop or Petroleum-derived)	1 qt./A
Petroleum-derived oil	1 gal./A

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 lbs. 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 lbs. 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 80W or 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. Apply at the rates shown in Table 2. 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 the recommended rate of ATRAZINE 90 WDG HERBICIDE and simazine shown in Table 2 for the soil texture 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 or glyphosate). 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.

TABLE 2: TANK MIXTURES WITH SIMAZINE ON CORN

BROADCAST RATE PER ACRE							
1:1 Ratio*				1:2 Ratio**			
Atrazine 90	Simazine 80W	Simazine 90DF	Simazine 4L	Atrazine 90	Simazine 80W	Simazine 90DF	Simazine 4L
1.1 lbs.	1 1/4 lbs.	1 1/4 lbs.	2 pts.	0.73 lb.	1 1/4 lbs.	1 1/4 lbs.	2 pts.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sand clay, or silty clay with low organic matter:							
1.3 lbs.	1 1/2 lbs.	1 1/2 lbs.	2 1/2 pts.	0.88 lb.	2.0 lbs.	1 1/2 lbs.	3 1/4 pts.
Loam, silt loam, silt clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with medium to high organic matter, and clay (including dark prairie soils of the corn belt):							
1.6 lbs.	1 3/4 lbs.	1 3/4 lbs.	3 pts.	1.07 lbs.	2 1/2 lbs.	2 1/2 lbs.	3 1/2 pts.

*For control of most weeds.

**For control of expected heavy infestations of crabgrass and fall panicum.

ATRAZINE 90 WDG HERBICIDE + Simazine 80W, Simazine 4L, or Simazine 90DF with Glyphosate

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 80W, Simazine 4L, or Simazine 90DF with Paraquat

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 X-77®, LOVELAND ACTIVATOR 90, or similar nonionic surfactant approved for agricultural use.

Continue agitation during application. Apply 1.1 to 2.2 lbs. of ATRAZINE 90 WDG HERBICIDE plus 1 1/4 to 2 1/2 lbs. simazine 80 (or 2 to 4 pts. simazine 4L, or 1 1/2 to 2 1/2 lbs. simazine 90DF) plus the recommended label rate of paraquat in 20 to 60 gals. of water per sprayed acre. Make broadcast application before, during, or after planting, but before emergence of corn. Add 1/2 pt. 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

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 lbs. ATRAZINE 90 WDG HERBICIDE and recommended label rate of Paraquat per

689

ATRAZINE 90 WDG
EPA REG. NO. 34704-622

acre in 20 to 60 gallons of water per acre. Following the Paraquat label, add recommended 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 Paraquat label for further directions, limitations and cautions.

ATRAZINE 90 WDG HERBICIDE + Alachlor

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, lambsquarter, pigweed, purslane, mustard, common ragweed, smartweed and witchgrass.

Applications may be made preplant, within 7 days of planting; preemergence, or post-emergence, 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 + Paraquat or Glyphosate 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 paraquat or glyphosate labels must be followed.

ATRAZINE 90 WDG HERBICIDE + Propachlor 65W or Propachlor 4L

Use a tank mixture of ATRAZINE 90 WDG HERBICIDE + Propachlor 4L or 65W for control of most annual broadleaf and grass weeds in corn (field, hybrid seed, silage and sweet corn only), such as annual morningglory, annual ryegrass, barnyardgrass (watergrass), buttonweed (velvetleaf), carpetweed, cocklebur, crabgrass, fall panicum, Florida pusley, giant foxtail, green foxtail, yellow foxtail, goosegrass, groundsel, jimsonweed, lambsquarters, mustard, nightshade, pigweed, purslane, ragweed, smartweed and sunflower. Broadcast 1.15 to 1.7 lbs. of ATRAZINE 90 WDG HERBICIDE plus recommended label rate of propachlor per acre on the soil surface any time from immediately after planting until broadleaf and grasses reach the two-leaf stage. Use the lower rates of ATRAZINE 90 WDG HERBICIDE and propachlor on light-textured soils low in organic matter. Use the higher rates on heavy-textured soils high in organic matter.

A minimum of 1.4 lbs. per acre of ATRAZINE 90 WDG HERBICIDE in the tank mixture will give better control of annual morningglory, buttonweed (velvetleaf), cocklebur and sunflower.

Apply in a minimum of 20 gallons of water per acre. Non-pressure fluid fertilizer may replace all or part of the water used as a carrier for applications applied to the soil surface before crop and weeds emerge. Add the ATRAZINE 90 WDG HERBICIDE to the spray tank first and thoroughly mix with water.

Refer to propachlor label for further mixing and use directions, limitations and cautions.

ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E or ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E + Simazine

PREPLANT/PREEMERGENCE

Use a tank mixture of ATRAZINE 90 WDG HERBICIDE + Metolachlor 8E or ATRAZINE 90 WDG HERBICIDE + Metolachlor 8E + 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 8E 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 8E and simazine labels must be followed.

POSTEMERGENCE

Use a tank mixture of ATRAZINE 90 WDG HERBICIDE plus Metolachlor 8E 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 8E label. Note, where directions specify AAtrex Nine-O, substitute ATRAZINE 90 WDG HERBICIDE. All applicable directions, limitations, and precautions on the Metolachlor 8E label must be followed.

ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E + Paraquat or ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E + Glyphosate or ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E + Simazine + Paraquat or ATRAZINE 90 WDG HERBICIDE + Dual® (Metolachlor) 8E + Simazine + Glyphosate.

For Minimum-Tillage or No-Tillage Systems

Use a tank mixture of ATRAZINE 90 WDG HERBICIDE + Metolachlor 8E with paraquat or glyphosate, or ATRAZINE 90 WDG HERBICIDE + Metolachlor 8E + 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 8E 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 8E, 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 (lbs a.i. 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 pre-emergent sorghum forage.
- 3) Do not apply product 45 days prior to harvest for sweet corn forage and post-emergent 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 recommended 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 recommended rate of ATRAZINE 90 WDG HERBICIDE shown in Table 3 for the soil texture as a split treatment 30-45 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 or glyphosate). 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 Per Acre ¹
Highly erodible	30% or more (conservation tillage program)	2.2 lbs. Atrazine 90 WDG
	Less than 30% (conventional tillage program)	1.77 lbs. Atrazine 90 WDG
Not highly erodible	No limit	2.2 lbs. Atrazine 90 WDG

* As defined by the Natural Resource Conservation Service

¹ 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.

7 8 9

ATRAZINE 90 WDG EPA REG. NO. 34704-622

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 lbs. a.i. 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 0.9-1.3 lbs. 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 Per Acre Per Calendar Year
No	2.2 lbs. postemergence
Yes	2.77 lbs. combined from soil and postemergence 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 lbs. 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 6-10 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 gal. of emulsifiable oil/A for ground application and 0.5 gal./A for aerial application, or add 1 qt. 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): Broadleaf 1.3 lbs. this product per acre plus 0.75-1.5 pts. 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 at-planting systemic insecticide applied in-furrow are used. (5) Do not apply more than 2.2 to 2.77 lbs. 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

Dual (Metolachlor) 8E: Use as tank mixture with Metolachlor 8E for control of those weeds listed on the Metolachlor label, as well as on this label. Use this tank mixture only on sorghum seed treated with Concep®. Refer to the Metolachlor 8E 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 0.9-1.1 lbs. 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 qt. 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 lbs. 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 GENERAL 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-wheat rotation, broadcast 0.5-1.1 lbs. 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 GENERAL INFORMATION SECTION of this label.)

TANK MIXTURES FOR CHEMICAL FALLOW

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

Paraquat: If weeds are present at application, a tank mix with paraquat may be used. Broadcast 2.5 lbs. of ATRAZINE 90 WDG HERBICIDE plus recommended label rate of paraquat in 20-60 gals. of water/A by ground equipment. Add 0.5-1 pt. of nonionic surfactant per 100 gals. 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 4-6 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: If weeds are present at application, a tank mix with paraquat may be used. Broadcast 0.5-1.1 lbs. of ATRAZINE 90 WDG HERBICIDE plus recommended label rate of paraquat in 20-60 gals. of water/A by ground equipment. Add 0.5-1 pt. of a nonionic surfactant per 100 gals. 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 4-6 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 paraquat, 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 out-croppings, or exposed calcareous subsoil. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining

ATRAZINE 90 WDG EPA REG. NO. 34704-622

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 lbs. this product per acre in a minimum of 10 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, indiagrass, 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 lb. 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, foxtails*, junglerice* and wiregrass, broadcast 2.2-4.4 lbs. 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 gals. 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 GENERAL 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 gal. of water for each 1 lb. of product applied per acre.

Florida

For control of emerged pellitory weed: Apply 0.4-0.6 lbs. this product per acre in at least 40 gals. of water as a directed spray by ground equipment prior to close-in. Add 4 qts. of surfactant for each 100 gals. 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 ratooning:

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

Apply 4.4 lbs./A of ATRAZINE 90 WDG HERBICIDE preemergence. Follow with one or two applications, as needed, at 3.3 lbs./A postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant at a concentration of 2 qts./100 gals. 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 GENERAL 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 lbs./A to any one crop of sugarcane, or crop injury may result.

TURFGRASSES FOR SOD

St. Augustinegrass, Centipedegrass, and Zoysia Grass

Broadcast 2.2-4.4 lbs. 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.

Muck or peat	4.4 lbs. product	Old beds: Within 2 days after lifting sod New beds: 3-4 days after sprigging or plugging
Sandy soil	2.2 lbs. product	Old beds: Within 2 days after lifting sod New beds: 7-10 days after sprigging or plugging

If weeds regrow, apply an additional 2.2 lbs./A on muck or peat, or 1.1 lbs./A 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 pounds active ingredient per acre for any application, do not apply more than 6 pounds active ingredient per year. (5) For sandy soil: do not apply more than 2 pounds active ingredient per acre for any application, do not apply more than 3 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 bluegrass*, 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 gals. of water per acre or 1 gal. per 1,000 sq. ft.

Where annual bluegrass is the major weed, use 1.1 lbs of ATRAZINE 90 WDG HERBICIDE per acre (0.4 oz. per 1,000 sq. ft.). Use 1.1 lbs. this product (0.4 oz. per 1,000 sq. ft.) for control of the other weeds named above. Do not exceed 1.1 lbs./A 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 GENERAL INFORMATION SECTION of this label.)

For continued summer annual weed control, apply another 1.1 lbs. 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. (8) Do not apply this product to newly seeded bermudagrass until it has overwintered and has a well-developed rhizome system. Do not exceed 2 lbs. product/A 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 2.2-4.4 lbs. 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 pounds active ingredient per acre for any application. Do not apply more than 8 pounds active ingredient per year.

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

GUAVA

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 2.2-4.4 lbs. per acre of ATRAZINE 90 WDG HERBICIDE in 20-50 gals. of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80-100 gals. 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 pounds active ingredient per acre for any application. (4) Do not apply more than 8 pounds active ingredient per year.

989

ATRAZINE 90 WDG
EPA REG. NO. 34704-622

Dual ® trademark of SYNGENTA
Nine-O ® trademark of SYNGENTA
Unite ® trademark of Loveland Industries, Inc.
X-77 ® trademark of Loveland Industries, Inc.

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, loblolly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce, and Sitka spruce): Broadcast 2.2-4.4 lbs. this product in a minimum of 5 gals. of water per acre by air or 10 gals. 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 lbs. this product in a minimum of 5 gals. of water per acre by air or 10 gals. 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 GENERAL 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 pounds active ingredient per acre for any application. (7) Do not apply more than 4 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.

WARRANTY DISCLAIMER AND NOTICE

THE DIRECTIONS FOR USE OF THIS PRODUCT ARE BELIEVED TO BE ADEQUATE AND SHOULD BE FOLLOWED CAREFULLY. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT DUE TO SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OR ABSENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER.

THE PRODUCTS SOLD TO YOU ARE FURNISHED "AS IS" BY LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER, AND ARE SUBJECT ONLY TO THE MANUFACTURER'S WARRANTIES, IF ANY, WHICH APPEAR ON THE LABELS TO THE PRODUCTS SOLD TO YOU. EXCEPT AS EXPRESSLY PROVIDED HEREIN, LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD OR USE OF THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. EXCEPT AS EXPRESSLY STATED HEREIN, LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED BY USE OF THE PRODUCT. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND LOVELAND PRODUCTS INC.'S, THE MANUFACTURER'S OR SELLER'S TOTAL LIABILITY, SHALL BE LIMITED TO DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. NO AGENT OR EMPLOYEE OF LOVELAND PRODUCTS INC. OR SELLER IS AUTHORIZED TO AMEND THE TERMS OF THIS WARRANTY DISCLAIMER OR THE PRODUCT'S LABEL OR TO MAKE A REPRESENTATION OR RECOMMENDATION DIFFERENT FROM OR INCONSISTENT WITH THE LABEL OF THIS PRODUCT.

IN NO EVENT SHALL LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES AND THE BUYER AND USER WAIVE ANY RIGHT THEY MAY HAVE TO SUCH DAMAGES.

AAtrex ® trademark of SYNGENTA
Compex ® trademark of KALO Agricultural Chemicals, Inc.
Concept ® trademark of SYNGENTA

FORMULATED FOR



P.O. BOX 1286, GREELEY, COLORADO 80632-1286