

PM 25

59639-106

9/23/99

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

59639-106

Date of Issuance:

SEP 23 1999

NOTICE OF PESTICIDE:
 x Registration
 Reregistration

Term of Issuance: Conditional

(under FIFRA, as amended)

Name of Pesticide Product:

Atrazine 90 DF
Herbicide

Name and Address of Registrant (include ZIP Code):

Ms. Cheryl D. Miller, Labeling Specialist
VALENT USA CORPORATION
1333 n. California Blvd. Suite 600
Walnut Creek, CA 94596

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) or 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the following label changes:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 59639-106".
3. Submit one copy of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Jim Tompkins
Jim Tompkins, PM-25
Herbicide Branch
Registration Division, (7505C)

Date:

9-23-99



ACCEPTED
with COMMENTS
In EPA Letter Dated

SEP 23 1999

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
59639-106

**RESTRICTED USE HERBICIDE
DUE TO 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 DF HERBICIDE

For season long weed control in corn, sorghum and certain other crops

Active Ingredients	By Wt.
ATRAZINE: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine	85.5%
Related Compounds	4.5%
Other Ingredients	10.0%

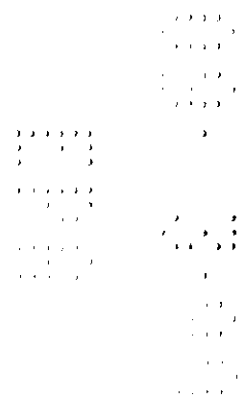
Atrazine 90 DF Herbicide is a water dispersible granule.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS

NET WEIGHT 10 POUNDS



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Do not breathe dust or spray mist. Avoid contact with eyes, skin or clothing.

STATEMENT OF PRACTICAL TREATMENT:

- If in eyes:** Flush eyes with plenty of water. Call a physician if irritation persists.
- If on skin:** Wash with plenty of soap and water. Get medical attention.
- If swallowed:** Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. **DO NOT INDUCE VOMITING** or give anything by mouth to an unconscious person.
- If inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
- Note to Physicians:** 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. Emergency Information - call 1-800-892-0099.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers (other than mixers and loaders) must wear: Long-sleeved shirt and long pants, waterproof gloves, and chemical-resistant footwear plus socks.

Mixers and Loaders must wear: Long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS:

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

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 ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) 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 ground water.

This product may not be mixed/loaded, or used within 50 ft. 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 spill or equipment leaks, container or equipment rinse or washwater, and rainwater 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 capacity 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 shipments to the mixing/loading sites. States may have in effect additional requirements regarding wellhead setbacks and operational area containment.

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

TILE-TERRACED FIELDS CONTAINING STANDPIPES:

To ensure protection of surface water from runoff through standpipes with tile outlets in terraced fields, one of the following options may be used:

1. Do not apply this product within 66 ft. of standpipes in tile outletted terraced fields.
2. 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 tile outletted terraced field.
3. 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 practice 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 waters.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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, waterproof gloves 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 areas without protective clothing until sprays have dried.

**DISCLAIMER, RISKS OF USING THIS PRODUCT,
LIMITED WARRANTY
AND LIMITATION OF LIABILITY**

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

RISKS OF USING THIS PRODUCT

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specially directed or approved on the label.

LIMITED WARRANTY

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

LIMITATION OF LIABILITY

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

PROMPT NOTICE OF CLAIM

Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

If Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

NO AMENDMENTS

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY OR ILLEGAL RESIDUES.

GENERAL INFORMATION

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

Atrazine 90 DF Herbicide controls many annual broadleaf and grass weeds in corn, sorghum, sugarcane, and certain other crops specified on this label. This product may be applied before or after weeds emerge.

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. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your state Agricultural Extension Service for specific recommendations.

Since this product acts mainly through root absorption, its effectiveness depends on moisture to move it into the root zone. If weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

This product is noncorrosive to equipment and metal surfaces, nonflammable, and has low electrical conductivity.

Avoid using near adjacent desirable plants or in greenhouses, or injury may occur.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

Where the use directions give a range of rates, use the lower rate on *coarse-textured soil* and soil low in organic matter; use the higher rate on *fine-textured soil* and soil high in organic matter.

Note: Valent does not recommend applications in combination with other herbicides or oils, except as specifically described on the label or in literature published by Valent.

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 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 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:

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

AERIAL APPLICATION

Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 gal. of water for each 1 lb. of Atrazine 90 DF Herbicide applied per acre. For postemergence treatments on corn and sorghum, apply recommended rate in a minimum of 2 gals. of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

APPLICATION IN WATER OR LIQUID FERTILIZER

Nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for pre-emergence, 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, 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 gals./A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1 pt. of fertilizer to each of 2 one qt. jars with tight lids.
2. To **one** of the jars, add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as COMPEX® or UNITE® (1/4 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 10 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 2 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 of 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 the 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 DF Herbicide and water, a compatibility agent such as COMPLEX 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 bag into tank.
6. Continue filling tank 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.

ROTATIONAL CROPS - ALL USES

1. Do not rotate to any crop except corn or sorghum until the following year, or injury may occur.
2. If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur.
3. In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum or when 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, or soybean injury may occur.
5. Injury may occur to soybeans planted 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 application, or injury may occur.

Table 1: Atrazine 90 DF Herbicide Applied Alone - Corn or Grain Sorghum⁽¹⁾

Preplant Surface - Applied, Preplant Incorporated, or Preemergence (or Postemergence at 2.2 lbs./A with Oil)		
Broadleaf and Grass Weeds Controlled		
Barnyardgrass (Watergrass) ⁽³⁾ Giant Foxtail ⁽²⁾ Green Foxtail ⁽³⁾ Large (Hairy) Crabgrass ⁽²⁾ Wild Oats Witchgrass (Panicum Capillare) ⁽¹⁾ Yellow Foxtail ⁽³⁾	Cocklebur ⁽²⁾ Groundcherry Jimsonweed Kochia Lambsquarters Annual Morningglory Mustards	Nightshade Pigweed Purslane Ragweed Sicklepod ⁽²⁾ Velvetleaf (Buttonweed) ⁽¹⁾
Postemergence with Emulsifiable Oil or Oil Concentrate in Water (at 1.3 lbs./A)		
Broadleaf Weeds Controlled		
Annual Morningglory Cocklebur Jimsonweed Lambsquarters Mustards Pigweed Ragweed Smartweed Wild Buckwheat Velvetleaf ⁽²⁾		
<p>⁽¹⁾ Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.</p> <p>⁽²⁾ Partial control only.</p> <p>⁽³⁾ Partial control only on medium and fine textured soils.</p>		

CORN

PREPLANT SURFACE - APPLIED (BROADLEAF AND GRASS CONTROL)

Use on *medium* and *fine textured soil* with minimum-tillage or no-tillage systems only in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, WI and WY. Apply the recommended rate of Atrazine 90 DF Herbicide shown in Table 2 up to 45 days prior to planting. If an unsatisfactory length of weed control results from adverse environmental conditions following early treatment, a follow-up application of an appropriately labeled herbicide may be used. If the follow-up treatment includes atrazine, do not exceed

the labeled rate for corn indicated in Table 2. On *coarse textured soils*, do not apply more than 2 weeks prior to planting.

If weeds are present at the time of treatment, apply in tank mix combination with a burndown herbicide (for example, GRAMOXONE® Extra or ROUNDUP®). Observe directions for use, precautions, and restrictions on the label of the burndown 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 2. Apply to the soil and incorporate before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within 2 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 2.

POSTEMERGENCE (BROADLEAF AND GRASS CONTROL)

Apply before weeds exceed 1.5 inches in height and before corn exceeds 12 inches in height at rate in Table 2.

Table 2: Broadleaf and Grass Weed Control in Corn⁽¹⁾

<p>For All Soil Applications Prior to Crop Emergence</p> <p>On Highly Erodible Soils (as defined by SCS)</p> <ul style="list-style-type: none"> • If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 2.2 lbs./A as a broadcast spray. • If the soil coverage with plant residue is less than 30% at planting, a maximum of 1.8 lbs./A may be applied. <p>On Soils Not Highly Erodible</p> <ul style="list-style-type: none"> • Apply 2.2 lbs./A as a broadcast spray.
<p>For Postemergence Application</p> <p>If no atrazine was applied prior to corn emergence, apply a maximum of 2.2 lbs./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (2.8 lbs. of this product) per acre per calendar year.</p>

⁽¹⁾ **Broadleaf control (Eastern CO, Western KS, Western NE, NM, OK Panhandle, 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 lbs./A, either preplant surface, preplant incorporated, or preemergence. On other soils in these areas, apply rate in Table 2 for broadleaf and grass control.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

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	Aerial Application
Oil Concentrate (Crop or Petroleum-derived)	1 qt./A	1/2 to 1 qt./A
Petroleum-derived oil	1 gal./A	2 qts./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./A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

BROADLEAF CONTROL

For postemergence control of those weeds listed under **Postemergence with emulsifiable oil or oil concentrate in water**, broadcast 1.3 lbs./A plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

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 exceed 2.5 lbs. active ingredient (or 2.8 lbs. of this product) per acre per calendar year. (6) Postemergence applications to corn must be made before corn exceeds 12 inches in height.

TANK MIXTURES FOR CORN

Atrazine 90 DF Herbicide may be tank mixed with these herbicides for control of certain broadleaf and grass weeds in corn:

DUAL® (metolachlor)	LASSO or LASSO EC + GRAMOXONE Extra
DUAL + GRAMOXONE Extra	GRAMOXONE Extra
DUAL + ROUNDUP (glyphosate)	PRINCEP
DUAL + PRINCEP®	PRINCEP + GRAMOXONE Extra
DUAL + PRINCEP + GRAMOXONE Extra	PRINCEP + ROUNDUP
DUAL + PRINCEP + ROUNDUP	RESOURCE® Herbicide
BEXTON® or RAMROD® (propachlor)	ROUNDUP
LASSO® or LASSO EC (alachlor)	SUTAN + ®
LASSO or LASSO EC + ROUNDUP	
Use tank mix directions appearing on the labels of the above herbicides when tank mixing with this product. Observe all precautions and limitations on labeling of products used in a particular tank mix.	
Note: When the labels of the above herbicides refer to Atrazine 80W, use equivalent rate of Atrazine 90 DF Herbicide. One lb. of 80W equals 0.9 lb. of Atrazine 90 DF Herbicide.	

PRINCEP 80W, PRINCEP 4L, or PRINCEP CALIBER 90

In addition to the weeds listed under **Atrazine 90 DF Herbicide Applied Alone - Corn or Grain Sorghum - Preplant Surface - Applied, Preplant Incorporated, or Preemergence**, this combination also controls crabgrass, fall panicum, and carpetweed.

Broadcast tank mix before planting, at planting, or after planting, but before crop and weeds emerge, at rates in Table 3. Use the 1:1 ratio for control of most weeds. Use the 1:2 ratio for expected heavy infestations of crabgrass and fall panicum. Cultivate shallowly if weeds develop.

PREPLANT SURFACE - APPLIED

Use on *medium* and *fine textured soils* with minimum-tillage or no-tillage systems only in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, WI and WY. Apply the recommended rate of Atrazine 90 DF Herbicide and PRINCEP shown in Table 3 up to 45 days prior to planting. Refer to the **Atrazine 90 DF Herbicide Alone** section for information if weeds should develop following early treatment. On *coarse-textured soils*, do not apply more than 2 weeks prior to planting. Refer to the **Atrazine 90 DF Herbicide Applied Alone - Preplant Surface - Applied** section of the corn label for additional details.

If weeds are present at time of treatment, apply in a tank mix combination with a burndown herbicide (for example, GRAMOXONE Extra or ROUNDUP).

Observe directions for use, precautions, and restrictions on the label of the burndown 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

Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within 2 weeks prior to planting.

PREEMERGENCE

Apply during or shortly after planting, but before crop and weeds emerge.

Refer to **Corn** sections of this label and to PRINCEP 80W, PRINCEP CALIBER 90, or PRINCEP 4L labels for further directions, limitations, and precautions.

Table 3: Tank Mixtures with PRINCEP on Corn

SOIL TEXTURE	BROADCAST RATE PER ACRE			
	1:1 Ratio ⁽¹⁾		1:2 Ratio ⁽²⁾	
	ATRAZINE 90 DF HERBICIDE	PRINCEP 80W ⁽³⁾	ATRAZINE 90 DF HERBICIDE	PRINCEP 80W ⁽³⁾
Sand, loamy sand, sandy loam.	1.1 lbs.	1.25 lbs.	0.73 lb.	1.67 lbs.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter.	1.3 lbs.	1.5 lbs.	0.88 lb.	2 lbs.
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.	1.8 lbs.	1.07 lbs.	2.4 lbs.

⁽¹⁾ For control of most weeds.

⁽²⁾ For control of expected heavy infestations of crabgrass and fall panicum.

⁽³⁾ When using PRINCEP CALIBER 90 or PRINCEP 4L, use equivalent rates. One lb. of PRINCEP 80W equals 0.9 lb. of PRINCEP CALIBER 90 or 1.6 pts. of PRINCEP 4L.

PRINCEP 80W, PRINCEP 4L, or PRINCEP CALIBER 90 plus ROUNDUP

Use as tank mixture for preemergence and postemergence control of certain broadleaf and grass weeds where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Refer to **ROUNDUP** label for all directions, weeds controlled, precautions and limitations.

PRINCEP 80W, PRINCEP 4L, or PRINCEP CALIBER 90 plus GRAMOXONE EXTRA

Use as tank mixture with PRINCEP and GRAMOXONE Extra to kill existing vegetation and for residual weed control where corn will be planted directly into a cover crop, established sod, or in previous crop residues. Add this product and PRINCEP to water in spray tank, agitating until thoroughly mixed. Then add GRAMOXONE Extra and a non-ionic surfactant, such as X-77[®]. Continue agitation during application. Broadcast 1.1 to 2.2 lbs. of this product plus 1.25 to 2.5 lbs. of PRINCEP 80W (or 2 to 4 pts. of PRINCEP 4L, or 1.1 to 2.2 lbs. of PRINCEP CALIBER 90) plus a suitable amount of GRAMOXONE Extra in 20 to 60 gals. of water per sprayed acre. Refer to the GRAMOXONE Extra label for the appropriate rates to utilize in this tank mixture. Apply before, during, or after planting, but before corn emerges. Add 0.5 pt. of a non-ionic surfactant, such as X-77, per 100 gals. of spray mixture. Use the higher rate of GRAMOXONE Extra specified on the label if existing vegetation is 4 to 6 inches tall. This mixture will not control weeds taller than 6 inches.

Refer to further limitations and precautions on labels for this product, PRINCEP and GRAMOXONE Extra.

Precautions: For all applications to corn: (1) To avoid crop injury and illegal residues, do not apply more than 2.8 lbs./A of this product per year. (2) For best control of velvetleaf and cocklebur, the application rate cannot be less than 2 lbs./A active ingredient, either alone or in tank mix combinations. (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.

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

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

PREPLANT SURFACE - APPLIED (BROADLEAF AND GRASS CONTROL)

Use on *medium* and *fine textured soil* with minimum-tillage or no-tillage systems only in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, WI and WY. Apply the recommended rate of Atrazine 90 DF Herbicide shown in Table 4 up to 45 days prior to planting. If an unsatisfactory length of weed control results from adverse environmental conditions following early treatment, a follow-up application of an appropriately labeled herbicide may be used. If the follow-up treatment includes atrazine, do not exceed the labeled rate for corn indicated in Table 2 . Under dry conditions, irrigation after application is recommended to move Atrazine 90 DF Herbicide into the soil.

If weeds are present at time of treatment, apply in a tank mix combination with a burndown herbicide (for example, GRAMOXONE Extra or ROUNDUP).

Observe directions for use, precautions, and restrictions on the label of the burndown 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 4 . Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within 2 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 4.

POSTEMERGENCE (BROADLEAF AND GRASS CONTROL)

Apply at rate shown in Table 4 before weeds exceed 1.5 inches in height and before sorghum exceeds 12 inches in height.

Table 4: Broadleaf and Grass Weed Control in Sorghum^(1,2)**For All Soil Applications Prior to Crop Emergence**

On Highly Erodible Soils (as defined by SCS)

- If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 2.2 lbs./A as a broadcast spray.
- If the soil coverage with plant residue is less than 30% at planting, a maximum of 1.8 lbs./A may be applied.

On Soils Not Highly Erodible

- Apply 2.2 lbs./A as a broadcast spray.

For Postemergence Application

- If no atrazine was applied prior to sorghum emergence, apply a maximum of 2.2 lbs./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (2.8 lbs. of this).

⁽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, except in northeast OK and the TX Gulf Coast and Blacklands areas.

⁽²⁾ Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

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. ai/A 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 lbs./A 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.

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 WEED CONTROL WITH EMULSIFIABLE OIL OR OIL CONCENTRATE IN WATER

Broadcast 1.3 lbs./A for control of many broadleaf weeds. Apply before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. In CO, western KS, NM, OK, TX and desert regions of AZ and CA, apply when sorghum is 6 to 12 inches in height, but before it reaches boot stage. In all other areas, apply after sorghum reaches the 3 leaf stage, but before it exceeds 12 inches in height. Add 1 gal. of emulsifiable oil per acre 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 DF Herbicide Applied Alone - Corn or Grain Sorghum - Postemergence with Emulsifiable Oil or Oil Concentrate in Water** (see Table 1).

*Precautions for applications with emulsifiable oil or oil concentrate in water: See "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 lbs./A plus 0.75 to 1.5 pts. of surfactant after sorghum reaches 6 inches in height, but before weeds exceed 1.5 inches in height. Apply only on sandy loam and finer textured soil.

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 2.5 lbs. active ingredient (2.8 lbs. of this product) per acre per calendar year. (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 8E

Use as tank mixture with DUAL 8E for control of those weeds listed on the DUAL 8E label, as well as on this label. Use this tank mixture only on sorghum seed treated with CONCEPT®. Refer to the DUAL 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 TX. Apply 0.9 to 1.1 lbs./A 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, such as X-77, 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./A.

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 DF 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 3.3 lbs./A 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 burndown herbicide before or after the application of Atrazine 90 DF 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 DF Herbicide Applied Alone - Corn or Grain Sorghum - Preplant Surface - Applied, Preplant Incorporated or Preemergence (see Table 1).

PRECAUTIONS

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

Note: 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 (CO, KS, ND, NE, SD AND WY)

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.

On soils in ND and SD with a pH greater than 7.5, do not exceed 1.5 lbs. ai/A of Atrazine 90 DF Herbicide. For soils with a pH less than 7.5 in ND and SD, apply 1 to 2 lbs. ai/A. Use the higher rate on *fine textured soils* and where heavy weed infestations are expected, use the lower rate on *coarse textured soils* and where light weed infestations are expected. In the event grasses are present the following spring, use a grass herbicide registered for use on corn.

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

WHEAT-FALLOW-WHEAT (CO, KS, ND, NE, 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 lbs./A on all soils except those listed under *Precautions*. For control of pigweed and wild sunflower, use the higher rate. Apply to stubble ground. Treat only once during same fallow period.

TANK MIXTURES FOR CHEMICAL FALLOW

WHEAT-SORGHUM-FALLOW OR WHEAT-CORN-FALLOW (KS, NE)

GRAMOXONE EXTRA

If weeds are present at application, a tank mix with GRAMOXONE Extra may be used. Broadcast 3.3 lbs. of Atrazine 90 DF Herbicide plus a suitable amount of GRAMOXONE Extra in 20 to 60 gals. of water per acre by ground equipment. Refer to the GRAMOXONE Extra label for the appropriate rates to utilize in this tank mixture. Add 0.5 to 1 pt. of a non-ionic surfactant, such as X-77, per 100 gals.

of spray mixture. Add Atrazine 90 DF Herbicide to spray tank first and thoroughly mix with water. Then add GRAMOXONE Extra, followed by surfactant. Use the higher rate of GRAMOXONE Extra specified on the label 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 GRAMOXONE Extra label for further directions, precautions, and limitations.

WHEAT-FALLOW-WHEAT (CO, KS, ND, NE, SD AND WY)

GRAMOXONE EXTRA

If weeds are present at application, a tank mix with GRAMOXONE Extra may be used. Broadcast 0.5 to 1.1 lbs. of Atrazine 90 DF Herbicide plus a suitable amount of GRAMOXONE Extra in 20 to 60 gals. of water per acre by ground equipment. Add 0.5 to 1 pt. of a non-ionic surfactant, such as X-77, per 100 gals. of spray mixture. Add Atrazine 90 DF Herbicide to spray tank first and thoroughly mix with water. Then add GRAMOXONE Extra, followed by surfactant. Use the higher rate of GRAMOXONE Extra specified on the label 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 GRAMOXONE Extra label for further directions, precautions and limitations.

If weeds are present at application and this product is used alone, use either an approved burndown 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 GRAMOXONE Extra, plant at least 2 inches deep and 12 months or more after application.

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.

AERIAL APPLICATION

In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Atrazine 90 DF Herbicide alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

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./A in a minimum of 10 gals. 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.

Note: To avoid illegal residues, (1) Do not cut or feed roadside grass hay. (2) Do not allow livestock to graze treated areas.

CONSERVATION RESERVE PROGRAM (CRP) - (NE, OK, OR AND TX)

For control or suppression of the following weeds: annual ragweeds, barnyardgrass, black nightshade, cheat, cocklebur, downy brome, fall panicum, field pennycress, giant foxtail, yellow foxtail, Japanese brome, Kentucky bluegrass, kochia, lambsquarters, little barley, maretail, pigweed, prickly lettuce, smooth brome and sunflower, refer to the directions, notes, and precautions below:

Pure stands of newly seeded big bluestem, switchgrass, and eastern gamagrass.

Use only on loam, silt loam, silty clay loam, clay loam, and silty clay soils with at least 1% organic matter.

ESTABLISHMENT

Broadcast 2.2 lbs./A of Atrazine 90 DF Herbicide preplant incorporated or preemergence at time of seeding and prior to emergence of weeds. Prepare a good firm seedbed. Plant 1/2 inch deep with a grassland drill (preferred method) or a conventional drill. If a conventional drill is used on prepared seedbeds, remove all tension from the disk openers. For best results, cultipack or roll after planting.

RENOVATION OF EXISTING STANDS OF BIG BLUESTEM AND SWITCHGRASS PLANTED ON CRP ACRES

Broadcast 1.1 to 2.2 lbs./A to existing stands of big bluestem and switchgrass prior to the emergence of weeds. Use the low rate on soils containing from 1 to 2% organic matter. Use the high rate on soils with 2% or more organic matter.

RENOVATION OF EXISTING STANDS OF THE FOLLOWING PERENNIAL RANGE GRASSES PLANTED ON CRP ACRES

Bluegrama, indiagrass, little bluestem, sand lovegrass, side-oats grama and western wheatgrass.

Broadcast 0.6 to 1.1 lbs./A in the spring prior to weed emergence, or in the fall before the ground freezes and prior to weed emergence after these species have been established for at least one growing season for control or partial control of the weeds listed above. Use the low rate for weeds controlled or suppressed easily. Use the higher rate on other weeds claimed in an earlier section of this label.

AERIAL APPLICATION

Make applications at maximum height of 10 ft. above vegetation. Use low drift nozzles at a maximum pressure of 40 psi. Restrict application to periods when wind speed does not exceed 10 mph to control drift. To assure that drift will not adversely affect adjacent sensitive nontarget plants, apply Atrazine 90 DF Herbicide by aircraft at a minimum upwind distance of 400 ft. from sensitive plants. Use 3 to 5 gals./A total

water volume; use the higher water volume when a dense, heavy ground cover is present.

- Notes:**
1. Do not cut or feed grass hay to livestock.
 2. Do not graze treated areas.
 3. Do not use seeds for bird food.
 4. Do not dump or spill product or dispose of containers within reach of livestock.
 5. Follow all applicable restrictions for the Conservation Reserve Program.

Precautions: To avoid crop injury make only one application per year. Slight discoloration of desirable grasses may occur following treatment. Injury may be enhanced when used on neutral or alkaline soils.

SEVERE DROUGHT CONDITIONS

Do not graze forage or cut forage for hay. Under severe drought conditions, the Conservation Reserve Program allows grazing and making of hay from CRP acres, as so specified by the local ASCS (Agricultural Stabilization & Conservation Service) office. This label **does not** allow grazing or making of hay from CRP acres that have been treated with atrazine under any circumstance.

SUGARCANE

For control of many broadleaf and grass weeds, including amaranths, crabgrass, fireweed, Flora's paintbrush, foxtails, junglerice and wiregrass, broadcast 2.2 to 4.4 lbs./A of Atrazine 90 DF Herbicide at time of planting or ratooning, but before sugarcane emerges. Broadcast aerially in a minimum of 5 gals. of spray per acre, or broadcast or band by ground equipment in a minimum of 20 gals./A, unless indicated otherwise. One additional application may be made over the sugarcane as it emerges, and 2 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.

Note: Where high rates of Atrazine 90 DF Herbicide are used, apply in a minimum of 1 gal. of water for each 1 lb. of product applied per acre.

AERIAL APPLICATION

In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Atrazine 90 DF Herbicide alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

FLORIDA

For control of emerged pellitory weed: Apply 0.4 to 0.6 lbs./A 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./A preemergence. Follow with 1 or 2 applications, as needed, postemergence to sugarcane and weeds, at 2.2 lbs./A. Treat before weeds exceed 1.5 inches in height.
2. Apply 1 to 3 times, as needed, at 2.2 lbs./A 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./A to weed free beds immediately after bed formation. Follow normal weed control program after planting.

Precautions: To avoid crop injury, (1) Do not apply more than 11 lbs./A to any one crop of sugarcane. (2) If making a 2.2 lbs./A application during the summer fallow period, do not exceed 8.8 lbs./A during the remainder of the growing season, or illegal residues may result.

TEXAS

Use Atrazine 90 DF Herbicide for control of barnyardgrass, pigweed, purslane and sunflower, in plant or ratoon sugarcane.

Apply 4.4 lbs./A of Atrazine 90 DF Herbicide preemergence. Follow with 1 or 2 applications, as needed, at 3.3 lbs./A postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a non-ionic surfactant at a concentration of 2 qts./100 gals. to the spray and apply before weeds exceed 1.5 inches in height.

Precautions: (1) Injury to sugarcane may occur when under moisture stress, when soil is of low adsorptive 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 (FLORIDA ONLY) - ST. AUGUSTINEGRASS, CENTIPEDEGRASS AND ZOYSIAGRASS

Broadcast 2.2 to 4.4 lbs./A according to soil texture to control those weeds listed under **Atrazine 90 DF Herbicide Applied Alone - Corn or Grain Sorghum - Preplant Surface - Applied, Preplant Incorporated, or Preemergence** (see Table 1).

Muck or Peat	4.4 lbs.	Old Beds:	Within 2 days after lifting sod.
		New Beds:	3 to 4 days after sprigging or plugging.
Sandy Soil	2.2 lbs.	Old Beds:	Within 2 days after lifting sod.
		New Beds:	7 to 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.

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) On newly sprigged turfgrass, temporary slowing of growth may follow application.

TURFGRASS FOR FAIRWAYS, LAWNS, SOD PRODUCTION* AND SIMILAR AREAS

*In states other than FL. For use on turfgrass for sod in FL, see **Turfgrasses for Sod (Florida only)** section.

BERMUDAGRASS, CENTIPEDEGRASS, ST. AUGUSTINEGRASS AND ZOYSIAGRASS

Apply Atrazine 90 DF 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 DF Herbicide will control annual bluegrass even if it is emerged at time of treatment. For control of summer annual weeds listed in the preemergence section of the **Atrazine 90 DF Herbicide Applied Alone - Corn or Grain Sorghum** section of this label, also apply Atrazine 90 DF 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./A of Atrazine 90 DF Herbicide (0.4 fl. oz. per 1,000 sq. ft.). Use 2.2 lbs./A (0.8 fl. 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.

For continued summer annual weed control, apply another 1.1 lbs./A at least 30 days after the previous application, but not after April 15. However, do not make more than 2 applications of this product per year.

Precautions: On newly sprigged turfgrass and hybrid bermudagrass, temporary slowing of growth and yellowing may occur following application. To avoid turf injury, (1) Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases. (2) Do not use on golf greens. (3) Do not use north of NC (except may be used in VA Coastal Plains) or west of the high rainfall areas of eastern OK and eastern TX. (4) Do not use on muck or alkaline soils. (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 2.2 lbs. 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 lbs./A 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.

GUAVA

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 2.2 to 4.4 lbs./A of Atrazine 90 DF Herbicide in 20 to 50 gals. of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80 to 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 8.8 lbs. of Atrazine 90 DF Herbicide 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, loblolly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce and Sitka spruce): Broadcast 2.2 to 4.4 lbs. 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 DF Herbicide before transplanting. In areas where spring and summer rainfall is inadequate to activate Atrazine 90 DF Herbicide, apply during fall prior to spring transplanting.

For the list of weeds controlled, see **Atrazine 90 DF Herbicide Applied Alone - Corn or Grain Sorghum - Preplant Surface - Applied, Preplant Incorporated, or Preemergence** (see Table 1).

QUACKGRASS CONTROL

Broadcast 4.4 lbs. 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.

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 DF Herbicide on coarse-textured soil. (4) To avoid crop injury, do not apply to seedbeds. (5) Also apply only once per year.

AERIAL APPLICATION

In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. above vegetation, using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Atrazine 90 DF Herbicide by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

STORAGE AND DISPOSAL

PROHIBITIONS

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

STORAGE

Store in a dry place.

Keep pesticide in original container.

Keep container closed when not in use.

Do not put concentrate or dilute into food or drink containers.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

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 bag into application equipment. Do not reuse container. Dispose of empty bag in a sanitary landfill, or by incineration or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

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Valent U.S.A. Corporation

P.O. Box 8025

Walnut Creek, CA 94596-8025

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