



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

FEB 2 3 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Linda C. Watson SOSTRAM CORP.

AGENT FOR: OXON ITALIA S. P. A.

70 MANSELL CT - SUITE 230

ROSWELL, GA. 30076

Subject:

Label Amendment Submission of 09/24/93 in Response to PR Notice 93-7

EPA Reg. No. 35915-7

MARZONE BRAND OF ATRAZINE 80W HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling AND
- WITHIN one year from date of this acceptance.



Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,

Jim Tompkins, Deputy Chief Registration Support Branch Registration Division (7505W)

Attachment

30H8

RESTRICTED USE PESTICIDE

(GROUND AND SURFACE WATER CONCERN)

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED B THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATE-MENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

OXON ITALIA

ATRAZINE 80W

HERBICIDE

FOR SEASON-LONG WEED CONTROL IN CORN AND SORGHUM FOR WEED CONTROL IN CERTAIN OTHER CROPS AND INDUSTRIAL SITES.

OXON ITALIA ATRAZINE IS A WETTABLE POWDER

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush with plenty of water for 15 minutes. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

See additional precautionary statements on side panel.

Net Contents:

EFA Reg. No. 35915-7

EPA Est. No.

MANUFACTURED FOR

OXON ITALIA S.p.A. Via Sempione, 195 - 20016 PERO MILANO - ITALY

ACCEPTED with COMMENTS In EPA Letter Dated FFR 2 3 1994

Under the Federal Insecticide, Fundicide, and Redouticide Act as succeeded, for the posticide registered under EPA Reg. No.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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Harmful or fatal if swallowed. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT

Handlers who may be exposed to the dilute through application or other tasks must wear: long-sleeved shirt and long pants, waterproof gloves and chemical-resistant footwear plus socks.

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks 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 CONTROLS 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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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

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 goundwater.

This product may not be mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells and sink holes. This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial for 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 foot buffer or set-back from runoff points must be planted to crop or seeded with grass or other suitable crop.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

DIRECTIONS FOR USE

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

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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 pesticide. 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 ent r 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.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or higher set-backs) which are different from the label, the more restrictive/protective requirements apply.

CHEMIGATION PROHIBITION

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

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Do not store under conditions which may adversely affect the container or its ability to function properly. Such conditions include, but are not limited to, positioning of the container in storage, storage temperature, potential for crushing or damade due to stacking, and penetration of moisture.

STORAGE: Store in a 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.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide and Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag 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

This 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, WE RECOMMEND THE USE OF THIS PRODUCT IN COMBINATION WITH OTHER REGISTERED HERBICIDES WHICH ARE NOT TRIAZINES. 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, non-flammable, and has low electrical conductivity.

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

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

Note: OXON ITALIA does not recommend applications in combination with other herbicides or oils, except as specifically described on the label.

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 gallons of spray mixture per acre for all preplant, preemergence, and postemergence applications (with or without oil or surfactant) with ground equipment.

Use a pump with a 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 gallons per minute per 100 gallons 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. Po 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. Chcc's nozzle manufacturer's recommendations.

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

band width in inches

x broadcast rate = amount needed

row width in inches per acre of field

Aerial Application: Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 gallon of water for each pound of ATRAZINE 80W applied per acre. For postemergence treatments on corn and sorghum, apply recommended rate in a minimum of 2 gallons 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 p rt of the water as a carrier for preemergence or preplant ground application on corn and sorghum. Before using, check the compatibility of this product with liquid fertilizer and/or nitrogen solution as shown below. Do not apply in nitrogen solution or complete liquid fertilizer after corn or sorghum emerges, except as noted under Lay-by Treatment for corn, or crop injury may occur.

To determine the compatibility of ATRAZINE 80W alone or in tank mixtures, with fluid fertilizer, pour the products into a small container of fluid fertilizer in the proportions shown below. For different spray volume or herbicide rate, make appropriate changes in the ingredients.

For each pound of ATRAZINE 80W or other liquid or flowable product to be applied per acre, add 1 level teaspoon or 5 milliliters of the product to one pint of fluid fertilizer (assuming a volume of 25 gallons per acre).

For each pint of a liquid or flowable product to be applied per acre, add 0.5 teaspoon or 2.5 milliliters of the product to one pint of fluid fertilizer (assuming a volume of 25 gallons per acre).

After thorough mixing, let stand for 5 minutes. If the herbicide/fertilizer combination remains mixed, or can be remixed readily, the mixture is compatible and can be sprayed. If it is not compatible, make a water slurry with the herbicide before adding the fertilizer and use the mixture only if this test shows it is compatible.

Application in Water Plus Emulsifiable Oil or Oil Concentrate: Adding an emulsifiable oil or oil concentrate, such as Prime Oil or Prime Oil II, to postemergence water-based sprays on 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 a crop oil containing 1-2% suitable emulsifier, or a suitable crop oil concentrate containing not more than 20% emulsifier or surfactant blend. Emulsifiable oil and oil concentrate 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 nor 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 cystem is working properly and creates a rippling or rolling action on the liquid surface. (5) Pour product directly from container 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.

ATRAZINE 80W applied alone--Corn or Grain Sorghum*

Preplant Incorporated or Preemergence Weeds Controlled:

annual morningglory
barnyardgrass
 (watergrass) ***
cocklebur**
giant foxtail**
green foxtail***
groundcherry
jimsonweed
kochia
lambsquarters
large (hairy) crabgrass**

nightshade
pigweed
purslane
ragweed
velvetleaf
(buttonweed)***
wild oats
witch grass
(Panicum capillare)***
yellow foxtail ***

Postemergence with Emulsifiable Oil or Oil Concentrate in Water--Weeds Controlled:

annual morningglory cocklebur jimsonweed lambsquarters mustards

pigweed ragweed smartweed wild buckwheat velvetleaf **

*Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) 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.

**Partial control only. '

***Partial control only on medium and fine-textured soils.

CORN

Preplant (Broadleaf and grass control): Broadcast in spring after plowing at rate in Table 1. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks prior to planting.

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

Preemergence (Broadleaf and grass control): Apply before weens exceed 1.5 inches in height at rate in Table 1. Postemergence application to corn must be made before corn reaches 12 inches in height.



Table 1: Broadleaf and Grass Weed Control in Corn*

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 2.5 lbs./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2 lbs./A may be applied.

On Soils Not Highly Erodible

Apply 2.5 lbs./A as a broadcast spray.

FOR POSTEMERGENCE APPLICATION

If no atrazine was applied prior to corn emergence, apply 2.5 lbs./A broadcast apply. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 3.1 lbs. per acre per calendar year.

*Broadleaf control (eastern CO, western KS, western NE, NM, OK Panhandle, west TX and eastern WY). On sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 1.5 lb./A, either preplant or preemergence. On the other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) 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 1 gal. of emulsifiable oil per acre for ground application, or 0.5 gal. per acre for aerial application, or add 1 qt. of oil concentrate, such as Prime Oil or Prime Oil II, per acre for ground application, or 1 pt. per acre for aerial application.

Broadleaf and Grass Control: Broadcast 1.5 lb. per acre 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:

(1) 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, as crop injury may occur. (2) Inbred lines or any breeding stock may be severely injured by applications with emulsifiable oil or oil concentrate.

(3) Adding other insecticides, herbicides, liquid fertilizers, or other materials is not recommended because they may cause compatibility problems or crop injury. (4) 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.

TANK MIXTURES FOR CORN

This product may be tank mixed with these herbicides for control of certain broadleaf and grass weeds in corn:

Dual* (metolachlor)

Dual + Gramoxone Super*

Dual + Roundup* (glyphosate)

Dual + Sim-Trol*

Dual + Sim-Trol + Gramoxone Super

Dual + Sim-Trol + Roundup

Bexton* or Ramrod*

Bladex*

Lasso* or Lasso EC (alachlor)
Lasso or Lasso EC + Roundup

Lasso or Lasso EC + Gramoxone Super

Gramoxone Super

Sim-Trol

Sim-Trol+ Graxomone Super

Sim-Trol+ 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 labels of the above herbicides refer to Atrazine 4L or Atrazine 90 dry flowable, use equivalent rates of ATRAZINE 80W. One quart of 4L equals 1.25 lb. of 80W. One lb. of 90 dry flowable equals 1.125 lb. of 80W.

Sim-Trol 4L or Sim-Trol 9DF

In addition to the weeds listed under ATRAZINE 80W Applied Alone--Corn and Grain Sorghum--Preplant or Preemergence, this combination controls crabgrass, fall panicum, and carpetweed.

Broadcast tank mix before planting, at planting, or after planting, but before weeds emerge, at rates in Table 2. 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: Apply in spring during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two 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 Sim-Trol 9DF and Sim-Trol 4L labels for further directions, limitations, and precautions.

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	В	BROADCAST RATE PER ACRE		
	l:l Ratio*		1:2 Ratio**	
Soil Texture	This Product	Sim-Trol 9DF ^l	This Product	Sim-Trol 9DF ^l
Sand, loamy sand, sandy loam	1.25 lb.	1.25 lb.	0.83 1Ь.	11.67 lb.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low	1.5 lb.	1.5 lb. ·	l 1b.	2 lb.
organic matter		, .	ļ	
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)	1.8 1b.	1.8 15.	1.2 lb.	2.4 lb

*For control of above weeds.

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

1 When using Sim-Trol 4L, use equivalent rates. One 1b. of Sim-Trol 9DF equals

1.8 pts. of Sim-Trol 4L.

Sim-Trol 4L, or Sim-Trol 9DF plus Roundup: Use as a 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.

Sim-Trol 4L or Sim-Trol 9DF plus Gromoxone Super: Use as a tank mixture with Sim-Trol and Gramoxone Super 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 Sim-Trol to water in spray tank, agitating until thoroughly mixed. Then add Gromoxone Super and a nonionic surfactant, such as X-77. Continue agitation during application. Broadcast 1.25-2.5 lb. of this product plus 2-4 pts. Sim-Trol 4L, or 1.1-2.2 lbs. Sim-Trol 9DF plus 1-2 pts. Gramoxone Super in 20-60 gallons of water per acre. Apply before, during, or after planting, but before corn emerges. Add 0.5 pts. of a nonionic surfactant, such as X-77, per 100 gallons of spray mixture. Use the 2 pint rate of Gramoxone Super if existing vegetation is 4-6 inches tall. This mixture will not control weeds taller than 6 inches.

Refer to further limitations and precautions of labels for this product, Sim-Trol and Gromoxone Super.

Precautions for all applications to corn: (1) The maximum application rate for corn is 3.1 lbs. per acre per calendar year. (2) Following harvest, plow (moldboard or disk-plow) and thoroughly till soil in fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of rate use.

Note for all Applications to Corn: Do not graze or feed forage from treated areas for 21 days following application.



ROTATIONAL CROPS: 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 2.5 lb/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.

SORGHUM AND SORGHUM-SUDAN HYBRIDS (Grain and Forage Types)

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

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

Table 3: Broadleaf and Grass Weed Control in Sorghum*

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 2.5 lbs./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2 lbs./A may be applied.

On Soils Not Highly Erodible

Apply 2.5 lbs./A as a broadcast spray.

FOR POSTEMERGENCE APPLICATION

BEST AVAILABLE COPY

If no atrazine was applied prior to sorghum emergence. apply 2.5 lbs./A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 3.1 lbs. per acre per calendar year.

^{*}Do not apply preplant 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.

Where there are state/local requirements regarding atrazine use (including lover maximum rates and/or set-backs) 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. However, the maximum application rate for sorghum is 3.1 lb/A per calendar year.

Preemergence broadleaf weed control in furrow irrigated bedded sorghum (AZ and CA only): For preemergence control of many broadleaf weeds, broadcast 1-1.5 lb. 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.

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 in Table 3 before weeds exceed 1.5 inches in height. Postemergence application to sorghum must be made before sorghum reaches 12 inches in height.

Postemergence Broadleaf Weed Control with Emulsifiable Oil or Oil Concentrate in Water: Broadcast 1.5 lb/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 6-12 inches in height. Do not apply after sorghum reaches 12 inches in height. In all other areas, apply after sorghum is completely emerged, but before sorghum reaches 12 inches in height. Add 1 gal. of emulsifiable oil per acre for ground application and 0.5 gal. per acre for aerial application, or add 1 qt. per acre of oil concentrate, such as Prime Oil or Prime Oil II, for ground application, or 1 pt/A for aerial application. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

For a list of weeds controlled, see ATRAZINE 80W Applied Alone--Corn or Grain Sorghum--Postemergence with Emulsifiable Oil or Oil Concentrate in Water.

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 %3, NM, OK, TX, and desert regions of AZ and CA only): Broadcast 1.5 lb/A plus 0.75-1.5 pt. 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 concentration 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 or preemergence, and an at-planting systemic insecticide applied in-furrow are used.

Note: Do not graze or feed forage from treated areas for 21 days following application.

Rotational Crops: See "Rotational Crops" in Corn section

TANK MIXTURES FOR GRAIN SORGHUM

Dual 8E: Use as tank mixture with Dual 8E for control of those weeds listed on the Dual label, as well as on this label. Use this tank mixture only on Concep*-treated sorghum seed. Refer to the Dual 8E label for all directions, pre-cautions, and limitations.

ATRAZINE 80W 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 3.75 lb/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 contact herbicide before or after the application of ATRAZINE 80W. 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 a list of weeds controlled, see ATRAZINE 80W Applied Alone--Corn or Grain Sorghum--Preplant Incorporated or Preemergence

Precautions: (1) Use only on silt loam or finer textured soil. (2) Wheat-sorghum-fallow cropping sequence must be followed. (3) Do not apply following sorghum harvest.

Note: Do not graze or feed forage from treated area to livestock. Do not plant any crop other than those listed 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.

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

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Wheat-Fallow-Wheat (CO, KS, MT, NE, ND, SD, and WY): For preemergence control of cheatgrass (downy brome, chess), common lambsquarters, field pennycress, kochia, mustard, Russian thistle, wild lettuce and suppression of volunteer wheat during fallow period of wheat-fallow-wheat rotations, broadcast 0.6-1.25 lb/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 Super: If weeds are present at application, a tank mix with Gramoxone Super may be used. Broadcast 3.75 lb of ATRAZINE 80W plus 1-2 pt of Gramoxone Super in 20-60 gal. of water per acre by ground equipment. Add 0.5-1 pt of a nonionic surfactant, such as Activate, per 100 gal. of spray mixture. Add ATRAZINE 80W to spray tank first and thoroughly mix with water. Then add Gramoxone Super, followed by surfactant. Use the 2 pt. rate of Gramoxone Super 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 Gramoxone Super label for further directions, precautions, limitations.

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

Gramoxone Super: If weeds are present at application, a tank mix with Gramoxone Super may be used. Broadcast 0.6-1.25 lb. of ATRAZINE 80W plus 1-2 pt. of Gramoxone Super in 20-60 gal. of water per acre by ground equipment. Add 0.5-1 pt. of a nonionic surfactant, such as Activate, per 100 gal. of spray mixture. Add ATRAZINE 80W to spray tank first and thoroughly mix with water. Then add Gramoxone Super followed by surfactant. Use the 2 pt. rate of Gramoxone Super 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 Gramoxone Super 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 Gramoxone Super, plant at least 2 inches deep and 12 months or more after application.

Precautions: (1) Do not use on sandy soil. (2) Do not treat eroded hillsides, caliche and rocky outcroppings of 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.

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 80W alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.



TURF GRASSES FOR SOD

St. Augustinegrass, Centipedegrass, and Zoysia Grass
Broadcast 2.5-5 bb. per acre according to soil texture to control those weeds
listed under ATRAZINE 80W Applied Alone--Corn or Grain Sorghum--Preplant
Incorporated or Preemergence.

		Old beds:	Within 2 days after lifting sod.
Muck or Peat 5	5 lb.	New beds:	3-4 days after sprigging or
		plugging.	
		Old beds:	Within 2 days after lifting sod.
Sandy Soil	2.5 lb.	New beds:	7-10 days after sprigging or
]	plugging.	

If weeds regrow, apply an additional 2.5 lb. per acre on muck or peat, or 1.25 lb. per acre on sandy soil.

Precautions: (1) Do not apply within 30 days prior to cutting or lifting. (2) Do not apply in combination with surfactants or other spray additives, or injury may occur. (3) Do not use north of NC.

MACADAMIA NUTS

For preemergence control of many broadleaf and grass weeds, including crabgrass, foxtail, wiregrass, Flora's paintbrush, spanishneedles, and fireweed, broadcast 2.5-5 lb. 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.

SUGARCANE

For control of many broadleaf grass weeds, including amaranths, crabgrass, fireweed, Flora's paintbrush, foxtails, junglerice and wiregrass, broadcast 2.5-5 lb. per acre of ATRAZINE 80W at time of planting or ratooning, but before sugarcane emerges. Broadcast aerially in a minimum of 5 gal. of spray per acre, or broadcast or band by ground equipment in a minimum of 20 gal. per acre, unless indicated otherwise. One additional application may be made over the sugarcane as it emerges, and two additional aerial 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 80W are used alone, apply in a minimum of l gal. of water for each 1 lb. of ATRAZINE 80W applied per acre.

Note: Temporary injury to trees may occur following the use of atrazine on coarse-textured soil.

Precautions: (1) No not graze treated areas. (2) Do not apply to seedbeds. (3) 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 80W alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

Florida

For control of emerged pellitory weed: Apply 0.5-0.75 lb. per acre in at least 40 gal. of water as a directed spray by ground equipment prior to close-in. Add 4 qt. of surfactant for each 100 gal. of spray. Thoroughly cover weed foliage.



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

- 1. Apply 5 lb/A preemergence. Follow with one or two applications, as needed, postemergence to sugarcane and weeds, at 2.5 lb. per acre. Treat before weeds exceed 1.5 inches in height.
- 2. Apply 1-3 times, as needed, at 2.5 lb/A postemergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

Texas

Use ATRAZINE 80W for control of barnyardgrass, pigweed, purslane and sunflower, in plant or ratoon sugarcane.

Apply 5 lb. per acre of ATRAZINE 80W preemergence. Follow with one or two applications, as needed, at 3.75 lb. per acre postemergence to sugarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant at a concentration of 2 qt. per 100 gal. 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 absorptive capacity, or when land is first cropped to sugarcane. (2) Do not apply after close-in. (3) Do not apply more than 12.5 lb. per acre to any one crop of sugarcane.

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 2.5-5 lb. in a minimum of 5 gal. of water per acre by air or 10 gal. 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 80W before transplanting. In areas where spring and summer rainfall is inadequate to activate atrazine, apply during fall prior to spring transplanting.

For the list of weeds controlled, see ATRAZINE 80W Applied Alone--Corn or Grain Sorghum--Preplant Incorporated or Preemergence.

Quackgrass control: Broadcast 5 lb. in a minimum of 5 gal. of water per acre by air or 10 gal. by ground between fall and early spring while trees are dormant and before quackgrass is more than 1.5 inches tall.

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 80W alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.



PERENNIAL RYEGRASS GROWN FOR SEED (Pacific Northwest Only)

For the control of annual broadleaf and grass weeds such as annual ryegrass, rattil fescue, and similar species: Broadcast 1½ lbs. in 15 lbs. or more water per acre, after first fall rains.

Precautions: (1) Apply only to perennial ryegrass stands from which a seed crop has been harvested. (2) Do not apply Atrazine 80W to ryegrass more than 2 years in succession. (3) Do not graze treated land within 10 days of application. (4) Do not plant treated land to other crops for at least 16 months.

WARRANTY - CONDITION OF SALE

Directions for use of this product are based on field use and tests believed reliable and should be followed carefully. It is however impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of the Seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result. ALL SUCH RISKS ARE ASSUMED BY THE BUYER. Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS OR MERCHANT-ABILITY. In no case shall the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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