

# **SORGHUM AND SORGHUM-SUDAN HYBRIDS - PREPLANT SURFACE**

General Information

## **USE INFORMATION**

ATRA-5 Herbicide will control most annual Broadleaf and Grass weeds in Corn, Sorghum, Sugarcane and certain other crops as specified on the label. This product may be applied before or after weeds emerge.

In each case where a range of rates is given, the lower rate should be used on Coarse textured soil and soil low in organic matter and the higher rate should be used on Fine textured soil and soil high in organic matter.

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

This product is non-corrosive to equipment and metal surfaces, nonflammable and has low electrical conductivity. Care should be taken to avoid using this product 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.

Note: The Seller does not recommend the use of this product in combination with other herbicides or oils except as specifically described on the label or in literature published by the Seller.

**FAILURE TO FOLLOW ALL USE PRECAUTIONS AND RESTRICTIONS ON THE LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY OR ILLEGAL RESIDUES.**

## **RESISTANCE MANAGEMENT**

This product is a Group 5 Herbicide.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on the 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, use 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.

## 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 pre-plant incorporated, preplant surface, pre-emergence and post-emergence 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.
3. 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 gallon 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.

**AERIAL APPLICATION:** Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 quart of water for each quart of this product applied per acre. For post-emergence treatments on Corn and Sorghum, apply the 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.

#### THIS PRODUCT IN WATER OR LIQUID FERTILIZER APPLICATIONS

Nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for pre-emergence and pre-plant applications of this product 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.

Refer in the label for tank mix information.

Limitations, Restrictions, and Exceptions

#### SORGHUM AND SORGHUM-SUDAN HYBRIDS

(Grain and Forage Types)

#### PRE-PLANT SURFACE APPLIED

Broadleaf and Grass Control: 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 this product shown in "TABLE 3" of the label 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 1" of the label.

Under dry conditions, irrigation after application is recommended to move this product into the soil.

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

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

#### FOR BROADLEAF AND GRASS WEED CONTROL

For All Soil Applications Prior to Crop Emergence

On Highly Erodible Soils

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at-planting, apply a maximum of 3.2 pts. of this product per acre as a single broadcast spray.

If the soil coverage with plant residue is less than 30% at-planting, a maximum of 2.5 pts. of this product per acre may be applied.

On Soils Not Highly Erodible

Apply a maximum of 3.2 pts. of this product per acre as a single broadcast spray.

Do not apply pre-plant in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN or TX. Do not apply pre-emergence in NM, OK or TX, except in Northeast OK and the TX Gulf Coast and Blacklands areas.

Highly and not highly erodible soils: As defined by the Natural Resource Conservation Service.

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

1. The maximum application rate for Sorghum is 2.5 pounds of active ingredient (4 pints of this product) per acre per calendar year.
2. When tank-mixing or sequentially applying atrazine or products containing atrazine to Sorghum, do not exceed an application rate of 2.0 pounds of atrazine active ingredient per acre for any single application, and the total pounds of atrazine applied (lbs. a.i./A) must not exceed 2.5 pounds active ingredient per year.

3. When tank-mixing or sequentially applying atrazine or products containing atrazine to crops other than Corn or Sorghum, the total pounds of atrazine applied (lbs. a.i./A) must not exceed the specific seasonal rate limits as noted in the use directions.
4. Do not harvest for forage within 60 days of a pre-emergence application and 45 days of a post-emergent application.
5. For all soil applications prior to crop emergence (except for pre-emergence 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.
6. For post-emergence applications, do not apply to Sand or Loamy sand, or injury may occur.
7. Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Applications to furrow-planted Sorghum should not be made until furrows are leveled (plowed-in). 8. Deep planter marks or seed furrows should also be leveled before application.
8. Application made to Sorghum growing under stress caused by minor element deficiency or to Sorghum growing on highly calcareous soils may result in crop injury.
9. Following harvest, plow (moldboard or disk-plow) and thoroughly till the soil in the Fall or Spring to minimize possible injury to rotational Spring-seeded crops, regardless of rate used.
10. Injury may occur if both this herbicide, pre-plant surface, pre-plant incorporated or pre-emergence and an at-planting systemic insecticide applied in-furrow are used.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

•

Restricted Entry Interval

12 hours

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Soils

[Medium](#)

[Fine](#)

Tillages

[No-Tillage](#)

[Minimum](#)

Timings

[Preplant](#)