

2.5 gal

PRECAUTIONARY STATEMENTS

Hazardous to Aquatic Life and Dangerous to Birds

Keep out of reach of children.

WARNING!

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

CAUSES EYE AND SKIN IRRITATION MAY CAUSE ALLERGIC SKIN REACTION

Do not get in eyes, on skin, or on clothing. Keep container closed.

Wash thoroughly after handling.

Wash thoroughly after handling.

Wash thoroughly after handling. Wash thoroughly after handling. Wash thoroughly after handling.

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DIRECTIONS FOR USE

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

Storage and Disposal

Do not store in water, basements, used or free by dump or drain.

DO NOT STORE ABOVE 100°F AND BELOW 10°F TO AVOID FREEZING OR SUPERHEATING.

Below 10°F the product may freeze. If frozen, the will be unusable when temperature is above 10°F.

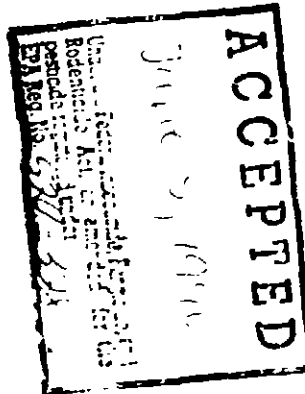
Above 100°F the product may become thick and unusable.

DO NOT STORE.

Waste resulting from the use of this product that cannot be used or otherwise repurposed should be disposed of in a landfill approved by your state or in accordance with applicable Federal, state or local provisions.

Do not store in water. Do not store in basements, used or free by dump or drain.

See also label for Complete Directions for Use.



RAMROD

AND **ATRAZINE** FLOWABLE

HERBICIDE MIXTURE BY **Monsanto**

(A)

Environmental Hazards

This product is toxic to fish and wildlife. Keep out of streams, ponds, or lakes. Do not apply above ground in any way to water bodies, and do not allow runoff from these areas.

Apply this product only as directed on the label.

BEST AVAILABLE COPY

Read the entire label before using this product.

Use only according to label directions.

Do not use in areas where it is prohibited or restricted.

Keep out of reach of children. **WARNING!** The contents are not for use as a...

ACTIVE INGREDIENTS*

Propazine (2-chloro-4-ethyl-6-isopropyl-1,3,5-triazine)	31.5%
Atrazine (2-chloro-4-ethyl-6-isopropyl-1,3,5-triazine)	10.0%
Other inert ingredients	58.5%
NET WEIGHT 2.5 GALS	100.0%

*Contains 250 grams/liter or 3 pound/gallon of propazine and 170 grams/liter or 1 pound/gallon of atrazine and other inert ingredients.

SHAKE WELL BEFORE USING

NET 2.5 GAL

(Front Side)

PM 25 5:21-328 1/2

FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE FOR ATRAZINE TO REACH GROUNDWATER.

POTENTIAL

B

Users are required to wear long sleeve shirts and long pants or equivalent, chemical resistant gloves and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use chemical resistant rubber or neoprene gloves and a face shield or goggles.

Environmental Hazards

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There is the possibility that this chemical can leach through the soil to groundwater, especially where soils are coarse and groundwater is near the surface. Users are advised not to apply this product to sand and loamy sand soils where the water table (groundwater) is near the surface and where these soils are permeable (well-drained).

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

This product may not be mixed/loaded or used within 50 feet of all wells including abandoned wells, drainage wells and sink holes.

Care must be taken when using this product to prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixture or rinsates.

Following application, and during rainfall events that cause runoff, atrazine may reach surface water bodies including streams, rivers and reservoirs.

This product is toxic to fish and wildlife. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not apply when weather conditions are likely to cause drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms. Do not contaminate water when disposing of equipment washwaters.

ACCEPTED
 June 5 1990
 Under the Federal Insecticide, Fungicide, and
 Rodenticide Act, as amended
 pesticide registration number
 EPA Reg. No. 6277-303

**RESTRICTED USE PESTICIDE
 (GROUNDWATER 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.

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO
 GROUNDWATER CONCERNS. USERS MUST READ AND FOLLOW
 ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR
 USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO
 REACH GROUNDWATER.

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RAMROD

AND **ATRAZINE** FLUTHIAL

HERBICIDE MIXTURE BY **Monsanto**

Selective herbicide for
 preemergence weed control
 in grain sorghum (milo),
 field corn, hybrid seed corn,
 silage corn and sweet corn.

Complete Directions for Use.

SHAKE WELL BEFORE USING

* Ramrod is a registered trademark of Monsanto
 Company

EPA Reg. No. 524-328-AA

1989-1 848.29-002-00/53

Read each of these sections of this label for essential
 product performance information.

USE THESE GOVERNMENT SECTION MARKERS.



Read the entire label before using this product.
Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION OR REPACKAGING IS PROHIBITED.

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label heading ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth

in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions on or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

Users are required to wear long sleeve shirts and long pants or equivalent, chemical resistant gloves and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use chemical resistant rubber or neoprene gloves and a face shield or goggles.

BEST AVAILABLE COPY

Environmental Hazards

There is the possibility that this chemical can leach through the soil to groundwater, especially where soils are coarse and ground water is near the surface. Users are advised not to apply this product to sand and loamy sand soils where the water table (ground water) is near the surface and where these soils are permeable (well-drained).

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

This product may not be mixed/loaded or used within 50 feet of all wells including abandoned wells, drainage wells and sink holes.

Care must be taken when using this product to prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixture or rinsates.

Following application, and during rainfall events that cause runoff, atrazine may reach surface water bodies including streams, rivers and reservoirs.

This product is toxic to fish and wildlife. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not apply when weather conditions are likely to cause drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms. Do not contaminate water when disposing of equipment washwaters.

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

Keep out of reach of children.
WARNING!
HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
Do not get in eyes, on skin, or on clothing.
Keep container closed.

~~While handling, wear rubber gloves.~~
Wash thoroughly after handling.

FIRST AID: IN CASE OF CONTACT, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing. For eyes, call a physician. Wash clothing before reuse.

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

In case of emergency involving this product, call collect, day or night, (314) 694-4000.

Environmental Hazard

This product is toxic to fish and wildlife. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.

Apply this product only as specified on this label.

ACTIVE INGREDIENTS:

Propachlor, (2-chloro-N-propylacetamide)	31.5%
Atrazine, (2-Chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine)	10.0%
Related atrazine compounds	0.5%
INERT INGREDIENTS	58.0%
	100.0%

*Contains 360 grams / liter or 3 pounds / gallon of propachlor and 120 grams / litre or 1 pound / gallon of atrazine and related atrazine compounds.

GENERAL INFORMATION

This herbicide mixture is recommended for control of many annual grasses and certain broadleaf weeds. For best results it should be applied to the soil surface before crop or weeds emerge. The seedbed should be fine, firm and free of clods and trash; application should be made within 5 days after the last tillage for weed control. Do not apply when conditions favor drift. Some moisture, either as rain or irrigation, is required soon after application to activate this herbicide mixture. On coarse texture soil one-third inch of rainfall, and on

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medium and fine textured and/or high organic soils one-third to three-fourths inch of rainfall is required depending upon original soil moisture. Better results are obtained when moisture occurs within 10 days after application. Generally lower amounts of rainfall are required when soil moisture is high at time of planting.

NOTE: Use of this product in any manner not consistent with the label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

Flush sprayer with clean water after use.

Do not use this product in fields where flood irrigation is to be practiced.

DO NOT apply in sprayable fluid fertilizer after crop emergence since crop injury may result.

Do not graze or feed sorghum (male) forage, silage or fodder (stubble) from treated fields to dairy animals.

PLANT ONLY CORN, SORGHUM OR SOYBEANS THE YEAR FOLLOWING THE USE OF THIS TANK MIXTURE. IF SOYBEANS ARE TO BE PLANTED, THERE IS A POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE. Do not plant soybeans in areas where furrow irrigation is practiced.

In Texas, on grain sorghum, use only on the fine textured soils of the Gulf Coast.

Applications made to sorghum growing on alkali soils or where cuts, fills or erasures have exposed calcareous or alkali subsoils may result in crop injury.

MIXING AND SPRAYING INSTRUCTIONS

Always predetermine the compatibility of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the Standard Sprayable Fluid Fertilizer Compatibility Test section on the label.

Mix this product or its labeled tank mix with the appropriate carrier as follows:

1. Place a 20 to 35 mesh screen or straining basket over the filling part.
2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier.
3. If a compatible agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by Federal Food and Drug Administration for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent. Check for adequate agitation.
4. Add the required amount of this product. Continue agitation.
5. Complete filling the sprayer tank with carrier. Remove hose from tank immediately after filling to avoid splashing back into carrier source. Maintain good agitation at all times until the contents of the tank are

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sprayed, otherwise, settling which can lead to clogging may occur. Close tank valves and drain all lines when spraying is delayed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen and or nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results, use flat fan or flood jet nozzle. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at pressures less than 40 psi.

STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always run evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential.

The test follows:

A. Materials Required For A Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "without").
2. Teaspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).
3. A minimum of one quart of the sprayable fluid fertilizer to be tested.
4. The herbicide(s) to be mixed.
5. A compatibility agent (the purpose of the agent is to help keep the fertilizer and herbicide(s) in suspension, if this assistance is needed).

B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".



Add One Pint Liquid Fertilizer To Two Quart Jars.



2. To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 TEAspoon is the equivalent of two parts per 100 gallons of liquid fertilizer).



To Jar Marked "WITH" Add Compatibility Agent And Shake To Mix.



3. To each jar add the appropriate amount of the product. Shake gently for five to ten seconds.



Add Herbicide(s) To Both Jars And Shake To Mix



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Amount To Be Added Per Part Of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)

HERBICIDE	RATE/A	Liquor	
		TEAspoon	Milliliters
This Product	3.5 qts =	3.4	or 16.6
	4.0 qts =	3.8	or 19.0
	4.5 qts =	4.3	or 21.4
	5.0 qts =	4.8	or 23.8
	5.5 qts =	5.3	or 26.2

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide concentration, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three parts (two parts = 1/4 TEAspoon or 1.2 milliliters, three parts = 3/8 TEAspoon or 1.8 milliliters per part of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

C. Observations And Decisions

1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
2. If a compatible agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the agent but not in the jar "with" agent, the use of a compatibility agent is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additive can be resuspended by shaking, commercial application is possible. Wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the product is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the treatment. If it is not compatible, the herbicide(s) should be premixed with water before adding to the spray tank.

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APPLICATION INFORMATION
BROADCAST APPLICATION

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

Broadcast Treatment — Apply in 15 or more gallons of water or sprayable fluid fertilizer per acre according to this label. Do not apply during periods of gusty winds or winds in excess of 15 mph.

Band Treatment — Apply a broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per acre} = \text{Band RATE per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per acre} = \text{Band VOLUME per acre}$$

Mount spray equipment on the planter with nozzles behind press wheel and apply this product at planting time.

NOTE: For band application nozzle placement, refer to the nozzle manufacturer's specification as a guide for determining proper nozzle height.

AERIAL APPLICATION

AVOID DRIFT — Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur.

Any resulting drift can damage nearby crops, vegetation or other areas on which treatment is not intended, and can cause application to be streaked or uneven, reducing the effectiveness of this product. In order to ensure uniform aerial application and to avoid overlapping and possible crop injury, it is recommended that 2 flagmen be used, one at each end of the field. Apply this product in 5 or more gallons of water per acre.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which disperse spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

CULTIVATION INFORMATION

As long as weeds are controlled, delay cultivation as long as possible.

If weeds seedlings emerge, shallow cultivate or rotary hoe immediately to improve weed control.

If cultivation or rotary hoeing is necessary because of soil crusting or compaction, tillage should be shallow to minimize dilution and displacement of this herbicide or tank mixture.

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WEEDS CONTROL

When applied as directed, under the conditions described, this product CONTROLS the following weeds:

- | | | |
|-------------------------------|------------|-----------------------------|
| Barnyardgrass | Watergrass | Nightshade, black |
| <i>Echinochloa crus-galli</i> | | <i>Solanum nigrum</i> |
| Buckhorn, wild | | Nightshade, hairy |
| <i>Polygonum convolvulus</i> | | <i>Solanum torquatum</i> |
| Carpetweed | | Panicum, tall |
| <i>Mollis verticillata</i> | | <i>Panicum</i> |
| Craggrass | | <i>dichotomiflorum</i> |
| <i>Digitaria</i> spp. | | Pigweed |
| Festool, giant | | <i>Amaranthus</i> spp. |
| <i>Setaria faberii</i> | | Purslane |
| Festool, green | | <i>Portulaca oleraceae</i> |
| <i>Setaria viridis</i> | | Pursley, Florida |
| Festool, yellow | | <i>Richardia scabra</i> |
| <i>Setaria leucocoma</i> | | Ragweed |
| Commersonia | | <i>Ambrosia</i> |
| <i>Elaeagnus indica</i> | | <i>artemisiifolia</i> |
| Groundnut | | Ryegrass, annual |
| <i>Sonchus oleraceus</i> | | <i>Lactuca</i> spp. |
| Kochia | | Smartweed |
| <i>Kochia scoparia</i> | | <i>Polygonum</i> |
| Lambquarters | | <i>polysperum</i> |
| <i>Chenopodium album</i> | | <i>Polygonum persicaria</i> |
| Mustard | | |
| <i>Brassica</i> spp. | | |

When applied immediately after planting, under the conditions described, this product at a rate of 4 to 5.5 quarts per acre on a broadcast basis REDUCES COMPETITION from the following hard-to-control weeds:

- | | |
|--------------------------|-------------------------------|
| Beltweed | Limnolobos |
| <i>Abrus precatorius</i> | <i>Datura stramonium</i> |
| Cocklebur | Morningglory, annual |
| <i>Xanthoxylum</i> | <i>Ipomoea purpurea</i> |
| <i>stramonium</i> | Signalgrass, broadleaf |
| | <i>Brachiaria platyphylla</i> |

DIRECTIONS FOR USE

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

Storage and Disposal

Do not contaminate water, foodstuffs, seed or feed by storage or disposal.

STORAGE:
STORE ABOVE 20°F AND BELOW 100°F TO KEEP PRODUCT IN SUSPENSION.

Below 20°F, the product may freeze. If frozen, mix well to reconstitute when temperature is above 40°F.

Above 100°F, the product may become thick and unapplicable.

DISPOSABLE:
Residue resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

(See the individual container label for disposal information.)

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**SHAKE WELL BEFORE USING
FOR WEED CONTROL IN
GRAIN SORGHUM (milled),
FIELD CORN, HYBRID SEED CORN,
SILAGE CORN AND SWEET CORN.**

Preemergence Surface Treatment — For control of listed annual grasses and broadleaf weeds, apply this product in 15 or more gallons of water or sprayable fluid fertilizer per acre on the soil surface any time from immediately after planting and before the crop or weeds emerge. See the following table for recommended rates. In areas of heavy grass or broadleaf weed infestations or when listed hard-to-control weeds are present, use the higher rate in the recommended ranges.

NOTE: The maximum application rate is 3 lbs. a.i. per acre per calendar year. →

SOIL TEXTURE	BROADCAST RATE IN QUARTS PER ACRE	
	Less than 3% organic matter	3% or more organic matter
COARSE*		
Sand thru Sandy Loam	3.5	4
MEDIUM		
Loam thru Sandy Clay Loam	4	4.5
FINE		
Silty Clay Loam thru Clay	4 to 4.5	4.5 to 5.5

*Do not use on grain sorghum on coarse texture soils with less than 3% organic matter.

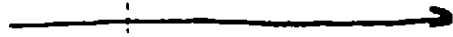
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Note for Corn only — This product can be applied until weeds reach the 2-leaf stage but prior to corn emergence. Applications beyond the 2-leaf stage will not provide satisfactory results. Better results will be obtained if rainfall occurs within 5 to 7 days after application. If rainfall does not occur, use shallow cultivation with a rolling cultivator or similar implement to remove emerged weeds. Avoid cultivation methods which will displace the treated section of the label for the recommended rate for the soil texture and organic matter content to be treated.

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In case of an emergency involving this product.
Call Collect, day or night, (314) 694-4000

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MONSANTO COMPANY
AGRICULTURAL PRODUCTS
ST. LOUIS, MISSOURI 63167 U.S.A.



Reg # 524-328

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RAMROD

AND **ATRAZINE**

FLOWABLE

HERBICIDE MIXTURE BY

Monsanto

Selective herbicide for preemergence weed control in grain sorghum (milo), field corn, hybrid seed corn, silage corn and sweet corn.

RESTRICTED USE PESTICIDE

(GROUNDWATER CONCERNS)

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

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUNDWATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUNDWATER.

Complete Directions for Use
SHAKE WELL BEFORE USING

EPH
Read each of these sections of this label for essential product performance information.

USE THESE GOVERNMENT STORAGE INSTRUCTIONS.



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RAMROD

AND **ATRAZINE**

FLOWABLE

HERBICIDE MIXTURE BY

Monsanto

Selective herbicide for preemergence weed control in grain sorghum (milo), field corn, hybrid seed corn, silage corn and sweet corn.

RESTRICTED USE PESTICIDE

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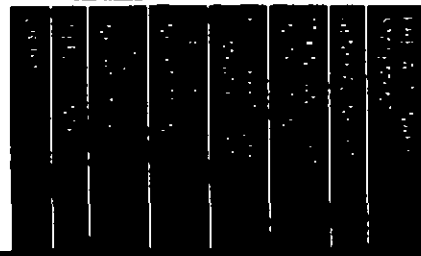
Complete Directions for Use
SHAKE WELL BEFORE USING

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001-29-000 06/83

Read each of these sections of this label for essential product performance information.

USE THESE CONVENIENT SUCROSE NUMBERS.



for the purposes set forth in the Complete Directions for Use label located ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which

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are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

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PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

WARNING!

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.

Do not get in eyes, on skin, or on clothing. Keep container closed.

Users are required to wear long-sleeve shirts and long pants or equivalent, chemical resistant gloves and boots (water-proofed). In addition, persons involved in mixing/loading operations are required to use resistant rubber or neoprene gloves and a face shield or goggles.

Wash thoroughly after handling.

STATEMENTS OF PRACTICAL TREATMENT: IF IN EYES:

Flush with plenty of water. Contact a physician.

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

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

In case of emergency involving this product, call collect, day or night, (314) 694-4000.

Environmental Hazard

There is the possibility that this chemical can leach through the soil to groundwater, especially where soils are coarse and groundwater is near the surface. Users are advised not to apply this product to sand and loamy sand soils where the water table (groundwater) is near the surface and where these soils are permeable (well drained).

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

This product may not be mixed / loaded or used within 50 feet of all wells, including abandoned wells, drainage wells and sink holes.

Care must be taken when using this product to prevent back-siphoning into wells, spills or improper disposal of excess pesticide, spray mixture or rinsates.

Following application, and during rainfall events that cause runoff, atrazine may reach surface water bodies, including streams, rivers and reservoirs.

This product is toxic to fish. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not apply when weather conditions are likely to cause drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms. Do not contaminate water when disposing of equipment washwaters.

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Apply this product only as specified on this label.

ACTIVE INGREDIENTS:

Propachlor, (2-chloro-N-isopropylacetanilide)	31.5%
Atrazine, [2-Chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine]	10.0%
Related atrazine compounds	0.5%
INERT INGREDIENTS	58.0%
	100.0%

*Contains 360 grams / liter or 3 pounds / gallon of propachlor and 120 grams / litre or 1 pound / gallon of atrazine and related atrazine compounds.

DIRECTIONS FOR USE

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

Storage and Disposal

Do not contaminate water, foodstuffs, seed or feed by storage or disposal.

STORAGE:

STORE ABOVE 20°F. AND BELOW 100°F TO KEEP PRODUCT IN SUSPENSION.

Below 20°F. the product may freeze. If frozen, mix well to resuspend when temperature is above 40°F.

Above 100°F. the product may become thick and unsprayable.

DISPOSAL:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

(See the individual container label for disposal information.)

SHAKE WELL BEFORE USING

GENERAL INFORMATION

This herbicide mixture is recommended for control of many annual grasses and certain broadleaf weeds. For best results it should be applied to the soil surface before crop or weeds emerge. The seedbed should be fine, firm and free of clods and trash; application should be made within 5 days after the last tillage for weed control. Do not apply when conditions favor drift. Some moisture, either as rain or irrigation, is required soon after application to activate this herbicide mixture. On coarse texture soil one-third inch of rainfall, and on medium and fine textured and / or high organic soils one-third to three-fourths inch of rainfall is required depending upon original soil moisture. Better results are obtained when moisture occurs within 10 days after application. Generally lower amounts of rainfall are required when soil moisture is high at time of planting.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

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Flush sprayer with clean water after use.
Do not use this product in fields where flood irrigation is to be practiced.
DO NOT apply in sprayable fluid fertilizer after crop emergence since crop injury may result.
Do not graze or feed sorghum (milo) forage, silage or fodder (stubble) from treated fields to dairy animals.
PLANT ONLY CORN, SORGHUM OR SOYBEANS THE YEAR FOLLOWING THE USE OF THIS TANK MIXTURE. IF SOYBEANS ARE TO BE PLANTED, THERE IS A POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE. Do not plant soybeans in areas where furrow irrigation is practiced.
In Texas, on grain sorghum, use only on the fine textured soils of the Gulf Coast.
Applications made to sorghum growing on alkali soils or where cuts, fills or erosions have exposed calcareous or alkali subsoils may result in crop injury.

MIXING AND SPRAYING INSTRUCTIONS

Always predetermine the compatibility of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the Standard Sprayable Fluid Fertilizer Compatibility Test section on this label

Mix this product or its labeled tank mix with the appropriate carrier as follows

1. Place a 20 to 35 mesh screen or wetting basket over the filling port.
2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier
3. If a compatible agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by Federal Food and Drug Administration for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent. Check for adequate agitation
4. Add the required amount of this product. Continue agitation
5. Complete filling the sprayer tank with carrier. Remove hose from tank immediately after filling to avoid siphoning back into carrier source. Maintain good agitation at all times until the contents of the tank are sprayed, otherwise, settling which can lead to clogging may occur. Close tank valves and drain all lines when spraying is delayed

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results, use flat fan or flood jet nozzle. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at pressures less than 40 psi



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quickly to make their combined use. This may be due to certain characteristics of fluid fertilizers. A simple test using the components is suggested to verify potential.

The test follows:

A. Materials Required For A Compatibility Test

1. Two one-quart jars with lid or "with" and "without".
2. Teaspoons (for a more exacting milliliter (ml.) pipette or graduated cylinder is desirable).
3. A minimum of one quart of the fertilizer to be tested.
4. The herbicide(s) to be mixed.
5. A compatibility agent (the purpose is to help keep the fertilizer in suspension, if this assistance is needed).

B. Procedure

1. Add one pint of the sprayable fertilizer to each jar. The other herbicide to be used on other herbicide marked "with" and "without".

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Add One Pint Liquid Fertilizer To Two Quart Jars.

2. To the jar marked "with", add 10 milliliters of a suitable compatibility agent. Shake gently for five to ten seconds to mix. This is the equivalent of two pints of liquid fertilizer.



To Jar Marked "With" Add Compatibility Agent And Shake To Mix

3. To each jar add the appropriate herbicide product. Shake gently for five to ten seconds to mix.



Add Herbicide(s) To Both And Shake To Mix

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HERBICIDE	RATE/A	Amount To Be Added Per Pint Of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)	
		Level	TEAspoons
This Product	3.5 qts =	3.4	or 16.6
	4.0 qts =	3.8	or 19.0
	4.5 qts =	4.3	or 21.4
	5.0 qts =	4.8	or 23.8
	5.5 qts =	5.3	or 26.2

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide concentration, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints = 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

C. Observations And Decisions

1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
2. If a compatible agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. Wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If this product is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the pre-mixing. If it is not compatible, the herbicide(s) should be pre-mixed with water before adding to the spray tank.

APPLICATION INFORMATION

GROUND APPLICATION

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

Broadcast Treatment — Apply in 15 or more gallons of water or sprayable fluid fertilizer per acre according to this label. Do not apply during period of gusty winds or winds in excess of 15 mph.

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Band Treatment — Apply a broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per acre} = \text{Band RATE per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per acre} = \text{Band VOLUME per acre}$$

Mount spray equipment on the planter with nozzles behind press wheel and apply this product at planting time.

NOTE: For band application nozzle placement, refer to the nozzle manufacturer's specification as a guide for determining proper nozzle height

AERIAL APPLICATION

AVOID DRIFT — Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. Any resulting drift can damage nearby crops, vegetation or other areas on which treatment is not intended, and can cause application to be streaked or uneven, reducing the effectiveness of this product. In order to ensure uniform aerial application and to avoid overlapping and possible crop injury, it is recommended that 2 flagmen be used, one at each end of the field. Apply this product in 5 or more gallons of water per acre.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which disperse spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

CULTIVATION INFORMATION

As long as weeds are controlled, delay cultivation as long as possible

If weeds seedlings emerge, shallow cultivate or rotary hoe immediately to improve weed control.

If cultivation or rotary hoeing is necessary because of soil crusting or compaction, tillage should be shallow to minimize dilution and displacement of this herbicide or tank mixture.

WEEDS CONTROL

When applied as directed, under the conditions described, this product **CONTROLS** the following weeds.

- | | | | |
|---------------------------|-------------------------------|-------------------|----------------------------|
| Barnyardgrass, Watergrass | <i>Echinochloa crus-galli</i> | Nightshade, black | <i>Solanum nigrum</i> |
| Beckwheat, wild | <i>Polygonum convolvulus</i> | Nightshade, hairy | <i>Solanum sarachoides</i> |
| Carpetweed | <i>Mollugo verticillata</i> | Panicum, fall | <i>Panicum</i> |
| Crabgrass | <i>Digitaria spp.</i> | Pigweed | <i>Amaranthus spp.</i> |
| Fenitail, giant | <i>Setaria faberi</i> | Purdane | <i>Portulaca oleracea</i> |
| Fenitail, green | <i>Setaria viridis</i> | | |

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Facill, yellow	Florida
<i>Setaria latifolia</i>	<i>Richardia scabra</i>
Goosegrass	Redroot
<i>Echinochloa indica</i>	<i>Ambrosia</i>
Groundnut	<i>artemisiifolia</i>
<i>Senecio vulgaris</i>	Bygonia, annual
Kochia	<i>Lolium</i> spp.
<i>Kochia scoparia</i>	Smartweed
Lambsquarters	<i>Polygonum</i>
<i>Chenopodium album</i>	<i>peruvianicum</i>
Mustard	<i>Polygonum persicaria</i>
<i>Brassica</i> spp.	

When applied immediately after planting, under the conditions described, this product at a rate of 4 to 5.5 quarts per acre on a broadcast basis REDUCES COMPETITION from the following hard-to-control weeds:

Butterweed, Yellowleaf	Mananweed
<i>Abutilon theophrasti</i>	<i>Datura stramonium</i>
Cocklebur	Morningglory, annual
<i>Xanthium</i>	<i>Ipomoea purpurea</i>
<i>strumarium</i>	Signalgrass, broadleaf
	<i>Brachiaria platyphylla</i>

**FOR WEED CONTROL IN
GRAIN SORGHUM (mills),
FIELD CORN, HYBRID SEED CORN,
SILAGE CORN AND SWEET CORN.**

Premix Surface Treatment — For control of listed annual grasses and broadleaf weeds, apply this product

in 15 or more gallons of water or sprayable fluid fertilizer per acre on the soil surface any time from immediately after planting and before the crop or weeds emerge. See the following table for recommended rates. In areas of heavy grass or broadleaf weed infestations or when listed hard-to-control weeds are present, use the higher rate in the recommended ranges.

NOTE: The maximum application rate is 3 pounds a. atrazine per acre per calendar year

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SOIL TEXTURE	BROADCAST RATE IN QUARTS PER ACRE	
	Less than 3% organic matter	3% or more organic matter
COARSE*		
Sand thru Sandy Loam	3.5	4
MEDIUM		
Loam thru Sandy Clay Loam	4	4.5
FINE		
Silty Clay Loam thru Clay	4 to 4.5	4.5 to 5.5

*Do not use on grain sorghum on coarse texture soils with less than 3% organic matter

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Note for Corn only — This product can be applied until weeds reach the 2-leaf stage but prior to corn emergence. Applications beyond the 2-leaf stage will not provide satisfactory results. Better results will be obtained if rainfall occurs within 5 to 7 days after application. If rainfall does not occur, use shallow cultivation with a rolling cultivator or similar implement to remove emerged weeds. Avoid cultivation methods which will displace the treated section of this label for the recommended rate for the soil texture and organic matter content to be treated.

For Lister or Deep Furrow Planted Corn — Apply this product at the higher broadcast rate listed in the rate table in the preemergence section of this label for the soil texture and organic matter content to be treated.

If heavy rains follow application, the treatment on the top and sides of the furrow may not provide as good weed control as that obtained in the bottom of the furrow.

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*Ramrod is a registered trademark of Monsanto Company

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EPA Reg. No. 526-328-AA

In case of an emergency involving this product,
Call Collect, day or night, (314) 694-4000.

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