

PM 25
524-328



USE THESE CONVERSION RECOMMENDATIONS

Product performance information

Read each of these sections of this label for Monsanto

1984-1
04829-00020/23

EPA Reg. No. 524-328-AA
Company

*Ramrod is a registered trademark of Monsanto

SHAKE WELL BEFORE USING

Complete Directions for Use.

silage corn and sweet corn,

field corn, hybrid seed corn,

in grain sorghum (milo),

preemergence weed control

Selective herbicide for

Monsanto

MEMBER MIXTURE BY

AND ATRAZINE

FLOWABLE

RAMROD

ACCEPTED
OCT 19 1987
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 524-328

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.

Complete Directions for Use.

SHAKE WELL BEFORE USING

®Ramrod is a registered trademark of Monsanto Company

EPA Reg. No. 524-328-AA

7944-1

844.29-000.28/53

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

USE THESE CONVENIENT SECTION MARKERS.

CROPS
WEEDS CONTROLLED
CULTIVATION INFORMATION
APPLICATION INFORMATION
FLUID FERTILIZER COMPATIBILITY LIST
MIXING AND SPREADING INSTRUCTIONS
GENERAL INFORMATION
PRECAUTIONARY STATEMENTS

Read the entire label before using this product.

Use only according to label instructions.

Not for reformulation or repackaging.

Read "LIMIT OF WARRANTY AND LIABILITY"

before buying or using. If terms are not acceptable, return at once unopened.

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 booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS 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 (i. weather conditions which are outside the range considered normal at the application site and for the time period when the product is

applied with the normal range being determined on the basis of the average range for the prior 40 years computed from the best available information, and ii. weather perils, including but not limited to hurricanes, tornadoes and floods) as well as weather considerations 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 or crop.

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 OR CONSEQUENTIAL DAMAGES.

The 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.

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 areas treated.

Apply this product only as specified on this label.

Storage and Disposal

Do not contaminate water, foodstuffs, seed or feed by storage and 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 buried on site in a safe place away from water supplies. All disposal should be in accordance with applicable Federal, state or local procedures.

(See the individual container label for disposal information.)

ACTIVE INGREDIENTS:

Propachlor (2-chloro-N-isopropylacetamide)	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/litre 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 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 where 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.

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 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 compatibility 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 nozzles. 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 mix 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 adjuvant 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 pints 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 this product. Shake gently for five to ten seconds.



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



HERBICIDE	RATE A	Amount To Be Added Per Pint Of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)	
		Level TEAspoons	Level 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 pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints = 3/4 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 compatibility 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 this product 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 this product 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 premixing. If it is not compatible, this product should be premixed with water before adding to the spray tank.

APPLICATION INFORMATION
GROUND APPLICATION

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 dispense 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 weed seedlings emerge, shallow cultivate or rotary hoe 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 product

WEEDS CONTROLLED

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

Barnyardgrass, Watergrass	Nightshade (black)
Echinochloa crus-galli	Solanum elaeagnifolium
Buckwheat (wild)	Nightshade (hairy)
Polygonum convolvulus	Solanum caracoides

Carpetweed	Panicum (fall)
Mollugo verticillata	Panicum
Crabgrass	dichotomiflorum
Digitaria spp.	Pigweed
Foxtail (giant)	Amaranthus spp.
Setaria faberii	Purslane
Foxtail (green)	Portulaca oleracea
Setaria viridis	Pusley (Florida)
Foxtail (yellow)	Richardia scabra
Setaria lutescens	Ragweed
Goosegrass	Ambrosia
Eleusine indica	artemisiifolia
Groundsel	Ryegrass (annual)
Senecio vulgaris	Lolium spp.
Kochia	Smartweed
Kochia scoparia	Polygonum
Lambsquarters	pensylvanicum
Chenopodium album	Polygonum persicaria
Mustard	
Brassica spp.	

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

Buttonweed, Velvetleaf	Jimsonweed
Abutilon theophrasti	Datura stramonium
Cocklebur	Morningglory (annual)
Xanthium	Ipomoea purpurea
pensylvanicum	Signalgrass (broadleaf)
	Brachiaria platyphylla

DIRECTIONS FOR USE

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

SHAKE WELL BEFORE USING

**FOR WEED CONTROL IN
GRAIN SORGHUM (milo),
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.

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.

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 soil layer. See the rate table in the preemergence treatment 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

848 29 000 2853



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

© MONSANTO COMPANY 1984

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

SHIPPING CONTAINER PRINTING LAYOUT

Date _____

Order No. _____

Req. No. **DEC. 10, 1985**

Die Reorder No. _____

BEST AVAILABLE COPY

ACCEPTED

OCT 19 1987
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 524-328

<p>2 3/4"</p>  <p>AND ATRAZINE FLOWABLE HERBICIDE MIXTURE BY Monsanto</p> <p>SHAKE WELL BEFORE USING TWO 2 UNITS</p> <p>1"</p>	<p>4"</p>  <p>SHAKE WELL BEFORE USING TWO 2 UNITS</p>	 <p>AND ATRAZINE FLOWABLE HERBICIDE MIXTURE BY Monsanto</p> <p>SHAKE WELL BEFORE USING TWO 2 UNITS</p>
---	---	---

PMS 186u RED (7375 RED)
 GCM1 90 BLACK

MAST

THIS MINIATURE SHOULD NOT BE FOLLOWED FOR EXACT SIZE OR COLOR.

OUR RESPONSIBILITY... REPLACEMENT OF DIES ONLY

11548 ADIE ROAD •

PM 25
524-328

13/13



BEST AVAILABLE COPY



AND **ATRAZINE** FLOWABLE

HERBICIDE MIXTURE BY **Monsanto**

Precautionary Statements

Keep out of reach of children.
WARNING!
POISONOUS IF SWALLOWED OR ABSORBED THROUGH SKIN.
CAUSES IRRITATION OF MUCOUS MEMBRANES.
DO NOT CHLORATE DISINFECTANTS.
Should get help, or call doctor, if you develop any of the following symptoms:
Nausea, vomiting, or diarrhea.
Headache, dizziness, or weakness.
Blurred vision.
Weakness or fatigue.
If you experience any of these symptoms, stop using this product immediately and call your doctor.
If you experience any of these symptoms, stop using this product immediately and call your doctor.
If you experience any of these symptoms, stop using this product immediately and call your doctor.

Directions and Precautions

Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

Environmental Precautions

Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

First Aid

In case of emergency, call your doctor.
In case of emergency, call your doctor.
In case of emergency, call your doctor.

(A)



First Aid

In case of emergency, call your doctor.
In case of emergency, call your doctor.
In case of emergency, call your doctor.

Directions and Precautions

Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

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

Read the entire label before using this product.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

Apply to soil in a uniform layer.
Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

SHAKE WELL BEFORE USING

Keep out of reach of children.
WARNING!

Do not use on crops or plants which are sensitive to ATRAZINE.
Do not use on crops or plants which are sensitive to ATRAZINE.

TWO 2.5 UNITS

848.29-000.29FL
EPA Est. 32761-MO-3

PMS 186u RED (7375 RED)
GCM1 90 BLACK