

PM 25 524-152

Labelling
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
DEC 9 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Dr. Russell P. Schneider
MONSANTO CO
AGENT FOR: MONSANTO AGRICULTURAL CO
700 14TH ST., N.W. - SUITE 1100
WASHINGTON, D.C. 20005

Subject: Label Amendment Submission of 07/16/93 in Response to PR Notice 93-7
EPA Reg. No. 524-152
GRANULAR RAMROD 20

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. 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:

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.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

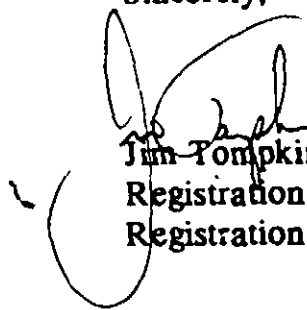
Submit the final printed labeling via the U.S. Postal Service to:

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

DEC 9 1993

Granular
RAMROD® 20
Selective Herbicide

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

584-152

For preemergence weed control in field corn, hybrid seed corn,
silage corn and grain sorghum (milo).

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

•Ramrod is a registered trademark of Monsanto Company.

~~1992-1~~ ~~843-30-000-30/53~~

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

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 booklet, ("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 OF 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 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.

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.

DANGER! PELIGRO!

~~Si usted no entiende la etiqueta, busque a alguien para que le la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).~~

**CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE.
HARMFUL IF SWALLOWED.
CAUSES NOSE AND THROAT IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.**

~~Do not get in eyes, on skin, or on clothing.
Wear goggles or face shield and rubber gloves when handling.
Avoid breathing dust.
Wash thoroughly with soap and water after handling.
Remove contaminated clothing and wash before reuse.~~

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

~~IF ON SKIN, immediately flush with plenty of water while removing contaminated clothing. As soon as soap is available, wash skin with soap and water. Wash clothing before reuse. Sensitized persons should avoid further contact and reuse of contaminated clothing. Get medical attention.~~

IF INHALED, remove individual to fresh air. Seek medical attention if breathing difficulty develops.

IF SWALLOWED, remove visible particles from mouth and rinse mouth thoroughly with water. Swallow the water to dilute. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Personal Protective Equipment

Applicators and other handlers must wear: long-sleeved shirt and long pants; waterproof gloves; shoes 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: when handlers use closed system or enclosed cabs 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

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply 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.

PHYSICAL OR CHEMICAL HAZARDS

In case of:

SPELL or LEAK, sweep up, remove and keep away from humans and domestic animals.

ACTIVE INGREDIENTS:

2-chloro-N-isopropylacetanilide	20.0%
INERT INGREDIENTS:	80.0%
	100.0%

DIRECTIONS FOR USE

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

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 of during application. For any requirement specific to your state or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

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; shoes plus socks; and protective eyewear.

Storage and Disposal

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

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.

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 product, is recommended for use as a preemergence herbicide to control most annual grasses and certain broadleaf weeds. It should be applied to the soil surface prior to weed or crop emergence. The soil surface should be freshly worked and free of weed top growth. The seed bed should be fine, firm and free of clods and trash.

Some moisture either as rain or irrigation is required soon after application to activate this product. On light sandy loam soil one-third inch of rainfall and on heavy clay and or high organic soils one-third to three-fourths inch of rainfall is required

depending upon original soil moisture. Best 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.

This product, with lesser amounts of rainfall in some instances, will allow the grass seedlings to emerge, but they will be severely stunted and with a subsequent cultivation they can be covered up.

If soil crusting becomes a problem and hoeing is necessary, hoe in the same direction the rows are planted.

Where deep lister planting is practiced only partial weed control can be expected on steep furrow sides. It is suggested that a 7-inch band be applied at the bottom of the furrow. Best results can be expected where the granules lie on an even flat surface not subject to shifting by wind or rain.

With broadcast treatment, as long as this product is controlling the grasses and weeds, there is no need for cultivation. For band treated fields, when first cultivation is made, set cultivator to throw soil into the row covering the band.

NOTE: Rates of application given on this label are general. Consult your Agricultural Experiment Station or Extension Service Weed Specialists concerning specific usage, dosages and methods of application.

Use of this product in any manner not consistent with label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination. Do not contaminate fertilizers, insecticides, fungicides and seed with Ramrod.

This product is toxic to fish. Keep out of lakes, ponds and streams. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

Do not reuse container. Destroy when empty.

SOIL TEXTURE

Applicators should evaluate soil and weed conditions carefully to assure that they choose the lowest effective label rate.

The recommended use rates of this product generally vary with soil texture. Unless soil texture is specifically named, rate tables throughout this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP*	SOIL TEXTURE
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COARSE:	sand, loamy sand, sandy loam
MEDIUM:	loam, silt loam, silt, sandy clay loam
FINE:	silty clay loam, clay loam, sandy clay, silty clay,
clay	

*Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

CALIBRATION AND APPLICATION INSTRUCTIONS

It is important that the applicator be calibrated properly to deliver the desired amount of this product to avoid applying too little or too much material. To calibrate, attach a cloth bag or strong plastic bag over the spreader plate or remove the delivery tube and attach a plastic nursing bottle over the spout. Operating over normal terrain to be planted, at planting speed, collect the granules for five hundred (500) linear feet and measure the VOLUME ounces collected. Use the following table to determine the correct volume of granules required for a 14-inch band at a given broadcast application rate.

Lbs. Per Acre To Be Applied (Broadcast Rate)	Volume To Be Collected (In 500 Feet)
20	6-1/4 oz
25	7-3/4 oz
30	9-1/2 oz

Tap plastic nursing bottle or other measuring container gently to settle the granules when taking a reading. Adjust the application equipment so that each spout dispenses the proper amount.

APPLICATION INFORMATION APPLICATION SYSTEMS

Ground Broadcast Treatment - Apply the recommended rates of this product per acre. Use broadcast applicators or fertilizer spreaders that can apply small amounts of granules evenly.

Band Treatment - Use applicators designed for this purpose. Calculate the amount of granules per acre needed for band treatment as follows:

Band With <u>in inches</u> Inches Between Crop Rows	x	Recom- mended Overall Rate	=	Pounds of this product needed per acre for band treatment
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For example: If 25 pounds per acre are recommended for overall treatment and you wish to treat a band of 14 inches wide in crop rows spaced 38 inches apart:

$\frac{14}{38} \times 25 = 9.2$ pounds of granules need per acre of crop for the band treatment.

For application of this product do not rely on settings used for other granular herbicides.

APPLICATION TIMING AND METHODS

Preemergence Surface Application - This product may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/3 to 3/4 inch is normally adequate. Performance is improved when moisture is received with 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

CULTIVATION INFORMATION

If annual grass or broadleaf weed seedlings emerge, rotary hoe immediately to improve weed control.

If cultivation is necessary because of soil crusting or compaction, tillage should be shallow to minimize dilution of this herbicide.

Except for the above, as long as the grasses and weeds are controlled, delay cultivation as long as possible.

WEEDS CONTROLLED

Applicators should evaluate soil and weed conditions carefully to assure that they choose the lowest effective label rate.

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

- | | |
|-------------------------|----------------------|
| Ryegrass, annual | Goosegrass |
| Lolium spp. | Eleusine indica |
| Barnyardgrass, | Groundsel |
| Watergrass | Senecia vulgaris |
| Echinochloa crus-galli | Lambsquarters |
| Carpetweed | Chenopodium album |
| Mollugo verticillate | Pigweed |
| Crabgrass | Amaranthus spp. |

Digitaria spp.
 Panicum, fall
 Panicum
 dichotomiflorum
 Pusley, Florida
 Richardia scabra
 Foxtail, giant;
 Millet, wild
 Setaria faberi
 Foxtail, green
 Setaria viridis
 Foxtail, yellow
 Setaria glauca

Purslane
 Portulaca oleracea
 Ragweed
 Ambrosia artemisifolia
 Sandbur
 Cenchrus spp.
 Shepherdspurse*
 Capsella bursa-pastoris
 Smartweed*
 Polygonum
 persicaria only
 Buckwheat, wild*
 Polygonum convolvulus

* Apply 25 to 30 pounds per acre of this product for control of these weeds.

This product WILL NOT CONTROL Johnsongrass, Canada thistle, field bindweed, quackgrass, morningglory, cocklebur and bullnettle.

CORN

(Field corn, hybrid seed corn and silage corn)

Apply this product for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

APPROVED APPLICATION SYSTEMS

Ground - Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides information on the application of this tank mixture using the system selected.

APPROVED APPLICATION METHOD

Preemergence Surface - Apply this tank mixture after planting, before crop and weed emergence and within 5 days after last preplant tillage operation. See the following tables for recommended broadcast and banded rates per acre for preemergence surface applications.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

Preemergence Surface Application Rates

SOIL TEXTURAL GROUP*	BROADCAST RATES PER ACRE (POUNDS)	
	Less than 3% organic matter	More than 3% organic matter

COARSE	20 lbs	25 lbs
MEDIUM	22 lbs	27 lbs
FINE	25 lbs	30 lbs

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BAND TREATMENT (Behind Press Wheel)

Broadcast lbs Rate/Acre**	<u>20 lbs</u>	<u>22 lbs</u>	<u>25 lbs</u>	<u>27 lbs</u>	<u>30</u>
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14" BAND ON VARIOUS ROW SPACINGS

ROW SPACINGS lb/acre	lb/acre	lb/acre	lb/acre	lb/acre	lb/acre
40	7	7.7	8.8	9.5	10.5
38	7.4	8.1	9.2	9.9	11
36	7.8	8.6	9.7	10.5	11.7
30	9.3	10.3	11.7	12.6	14

*Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

**Use the higher rate for high organic soils, or in areas of heavy weed infestations.

FOR LISTER OR DEEP FURROW PLANTED CORN

Broadcast (overall treatment) - Apply this product at the broadcast rate of 25 to 30 pounds per acre.

Band Treatment (Behind Press Wheel) - For a 7 inch band treatment over the row (38 inch spacing), apply 4.6 to 5.5 pounds of granular this product per acre.

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

FOR FURROW IRRIGATED CORN

This product must be incorporated into the soil by harrow, finger weeder or rotary hoe for weed control and furrow irrigated land. Shallow incorporation of at least one-half inch but not more than 2 inches is most effective for weed control. Incorporation deeper than 2 inches will result in unsatisfactory weed control. If applied on very dry soil, irrigation is necessary to activate this product. See the tables above for recommended rates on various soil textures and levels of organic matter.

GRAIN SORGHUM (milo)

NOTE: Do not graze or feed sorghum (milo) forage or silage from treated fields to dairy animals.

12 9 13

Apply this product for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

APPROVED APPLICATION SYSTEMS

Ground - Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the application of this product using the system selected.

APPROVED APPLICATION METHODS

Preemergence Surface - Apply this product after planting, before crop and weed emergence and within 5 days after last preplant tillage operation.

REFERENCE: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

Broadcast (overall treatment) - Apply 20 to 25 pounds of granular this product per acre on soil surface after planting and prior to emergence of either crop or weeds. In areas of heavy grass or broadleaf weed infestations and on high organic matter soils, use 25 pounds per acre.

Band Treatment (Behind Press Wheel) - Apply this product on the soil surface after planting and prior to emergence of either crop or weeds. Use the higher rate for high organic soil or in areas of heavy grass or broadleaf weed infestations.

BAND TREATMENT

Broadcast Rate/Acre	<u>20 lbs</u>	<u>22 lbs</u>	<u>25 lbs</u>
14" BAND ON VARIOUS ROW SPACINGS			
ROW SPACINGS	<u>lb/acre</u>	<u>lb/acre</u>	<u>lb/acre</u>
40	7	7.7	8.8
38	7.4	8.1	9.2
36	7.8	8.6	9.7
30	9.3	10.3	11.7

● Registered trademark of Monsanto Company

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