

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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MAR 1 2 1996

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

James S. Fickle Sandoz Agro Inc. 1300 East Touhy Avenue Des Plaines, IL 60018

Dear Dr. Fickle:

Subject Add Use on Dry Beans, Peanuts, Sweet Corn and Sorghum Frontier Herbicide
EPA Registration No. 55947-140
Guardsman Kerbicide
EPA Registration No. 55947-150
Frontier 6.0 Herbicide
EPA Registration No. 55947-159
Your Submission Dated June 16, 1995 and Jonathan E. Bryant's Submission Dated January 30, 1996

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is conditionally registered provided that you:

- 1. Submit by March 15, 1998 a Heritable Translocation Study conducted in accordance with the Good Laboratory Practice Standards, 40 CFR Part 160 and appropriate test guidelines as referenced in EPA's Data Requirements for Registration Regulations, 40 CFR Part 158.
- 2. Submit by March 15, 1997 either a new Acute LC₅₀ Mysid Shrimp Study (GLN 72-3) conducted in accordance with the Good Laboratory Practice Standards, 40 CFR Part 160 and appropriate test guidelines as referenced in FiA's Data Requirements for Registration Regulations, 40 CFR Part 158, or explain the discrepancy in the submitted study, MRID # 42336604, that reported increases in oxygen level under static conditions although aeration methods were reported as not being employed.
- 3. Submit the studies and testing specified in Attachment I Conditions For Registration For Soybean Use within agreed upon time frames.

- 4. Comply with the conditions in Attachment I <u>Conditions For</u>
 <u>Registration For Soybean Use</u> which outlines groundwater and surface water mitigation measures that must be undertaken by your company.
- 5. You will submit production information (pounds or gallons produced) for this product for the fiscal year in which the use on soybeans is condition registered, in accordance with Section 29 of FIFRA. The fiscal year begins October 1 and ends September 30.

The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information is to be submitted to:

Registration Support Branch Registration Division (7505W) Environmental Protection Agency Washington, DC 20460

6. Make the following label changes listed below before you release the product for shipment:

According to PR Notice 82-2, the Tank Mix Directions for Sweet Corn with Basagran ar Yaddok S12, for Sorghum with Basagran, Buctril, Weedmaster ar . 2,4-D, for Dry Beans with Far-Go and Poast, and for Peanuts must include statements similar to the following:

This product can be mixed with _______ (chemical name, including percentage of active ingredient and type of formulation, or specific product name, or both) for use on ______ (Crops/sites) in accordance with the more (most) restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

- 7. Submit one copy of the final printed label for the record.
- If these conditions are not complied with after the registration is issued, the registration will be subject to cancellation in accordance with Section 6(e) of the Act.

Conditional registration of this use will expire 1 year from the date on this letter unless it is determined from the environmental assessment that no additional studies are required. As stated in the "Reserved Issues" in the event that it is recommended that additional environmental fate data are needed up to and including prospective groundwater monitoring studies and or labeling changes are required, you must contact the Agency within 90 days from receipt of notification agreeing to further negotiations. If no agreement has been reached within six (6) months it shall be resolved by the sole determination of the Agency. Such determination will become final unless submitted within 10 working days to the Director of Office of Pesticide Programs.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

(Leresah. Stove

Acting Team Leader Product Manager (22)

Fungicide-Herbicide Branch Registration Division (7505C)

Enclosure

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ACCEPTED
with COMMENTS
In EPA Letter Dated

MAR | 2 1996

Under the Federal Insecticide, Fundicide, and Rodenticide Act

as amended, for the pesticide registered under EPA Reg. No.

GUARDSMAN Herbicide 55947-150 January 1996 PGUARDSS.25B

SUPPLEMENTAL LABELING

RESTRICTED USE PESTICIDE (GROUND AND SURFACE WATER 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 GROUND AND SURFACE WATER CONCERNS.

GUARDSMAN® HERBICIDE FOR WEED CONTROL IN SWEET CORN AND GRAIN SORGHUM

EPA Reg. No. 55947-150

DIRECTIONS FOR USE

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

IMPORTANT

Before using this product, read and carefully observe all applicable directions, restrictions, and precautionary statements on the EPA-registered container label. In addition read and follow General Information, Weeds Controlled, Use Methods and Timing, Mixing and Application sections of the Directions For Use Booklet attached to the GUARDSMAN® Herbicide (GUARDSMAN) container. Eclipta is now added to the list of weeds that are partially controlled by GUARDSMAN in all crop uses. Follow all directions given below for crop specific uses in sweet corn and grain sorghum.

GUARDSMAN SWEET CORN USE PROGRAMS

GUARDSMAN may be used as a preplant surface, preplant incorporated, preemergence or postemergence (up to 8 inch tall sweet corn) application in sweet corn. A single or split application may be used.

Before application to sweet corn, verify with your local seed company (supplier) the selectivity of GUARDSMAN on your specific variety(s). This precaution will help avoid potential injury to sensitive varieties.

Delayed emergence or leaf wrapping of sweet corn may occur if extreme conditions of high rainfall with extended periods of water saturated soil and/or cool weather occur during sweet corn germination and emergence.

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Sweet corn may be grazed or fed to livestock at 40 or more days after application of GUARDSMAN. Sweet corn ears may be harvested at 50 or more days after application of GUARDSMAN.

Do not use adjuvants with Guardsman® Herbicide in sweet corn.

GUARDSMAN USE RATES IN SWEET CORN

For GUARDSMAN rates in sweet corn use rates given for field corn, seed corn and popcorn in Directions for Use Booklet attached to the GUARDSMAN container.

GUARDSMAN TANK MIXTURES AND SEQUENTIAL USE PROGRAMS IN SWEET CORN

Tank mixtures and sequential use programs for field corn, seed corn, and popcorn in Directions for Use Booklet attached to the GUARDSMAN container label apply for use in sweet corn when the companion product is registered for sweet corn use. Always read the companion product label(s) to verify allowed uses in sweet corn including: specific use rates by soil types, weed species, and weed or crop growth stage. Follow all precautions and restrictions including state and local use restrictions that may apply to specific companion products. In addition GUARDSMAN may be tank mixed with or applied sequentially to Basagran® or Laddok® S-12 herbicides.

GUARDSMAN GRAIN SORGHUM USE PROGRAMS

GUARDSMAN may be used as a preplant surface, preplant incorporated, preemergence or postemergence (up to 5 leaf or 8 inch tall) sorghum. A single or split application program may be used. All GUARDSMAN applications made prior to 2 leaf growth stage must only be made to sorghum seed that has been properly treated by the seed company with an approved chloroacetamide herbicide safener or severe injury may occur.

Under high soil moisture and/or cool conditions, GUARDSMAN application may cause temporary stunting or leaf wrapping of sorghum. Sorghum will normally outgrow these symptoms in 10-14 days.

For best performance make preemergence surface applications within 5 days of the last preplant tillage. If weeds are emerged apply GUARDSMAN with contact herbicides to control emerged vegetation.

If grasses are emerged GUARDSMAN must be applied before they reach the 2 leaf stage or must be used in combination with an effective postemergence herbicide.

Do not apply GUARDSMAN postemergence in Oklahoma, Texas, New Mexico and western Kansas.

Sorghum forage may be grazed or fed to livestock at 60 or more days after application. Grain and fodder may be harvested and fed at 80 or more days after application of GUARDSMAN.

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GUARDSMAN is not registered for use on sweet or forage sorghum.

Do not use adjuvants with Guardsman® Herbicide in sorghum.

GUARDSMAN USE RATES IN SORGHUM

For GUARDSMAN rates in sorghum use rates given for field corn, seed corn and popcorn in the Directions for Use Booklet attached to the GUARDSMAN container. Additional rate recommendations specific for sorghum: for best weed control in coarse textured soil use 3 pt/A and for sorghum produced under irrigation, use a minimum of 3.5 pt/A.

GUARDSMAN TANK MIXTURES AND SEQUENTIAL USE PROGRAMS IN SORGHUM

GUARDSMAN may be applied prior to, in tank mix with, or following use of one or more of the following herbicides in sorghum: atrazine, BANVEL®, Basagran, Buctril®, Cyclone® CF, Fallow Master™, Gramoxone® Extra, glyphosate (Roundup®), Laddok S-12, Landmaster® BW, MARKSMAN®, Milo-Pro®, WEEDMASTER® or 2,4-D.

When using tank mix or sequential applications with GUARDSMAN, always read the companion product label(s) to determine specific use rates by soil types, weed species and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

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GUARDSMAN plus	Applications may be made preplant, preplant
atrazine 0.5 to 1.0 lb ai	incorporated, preemergence, or early
	postemergence. Do not apply before sorghum
	emergence on coarse textured soils or medium
	textured soils with less than 1.5% organic
	matter. Do not apply postemergence in OK, TX,
	NM, CO and western KS before sorghum is 6"
	tall.
GUARDSMAN plus	Applications may be made preplant or
Milo-Pro 0.60 to 2.3 lb ai	preemergence in states where Milo-Pro is
	approved for use. Do not apply this combination
	on sand or sandy loam soils.
GUARDSMAN plus	Make applications after sorghum is in the 2nd
BANVEL 0.5 pt/A	leaf stage but no later than the 5th leaf stage of
or	sorghum. This treatment must be combined with
MARKSMAN 2.0 pt/A	a herbicide that controls grass weeds greater
	than 1.5 inches tall at the time of application.
	Tank mix may cause temporary sorghum stunting
	or leaning that is generally outgrown within 10-
	14 days.
GUARDSMAN plus	Make application preplant or postemergence on
Buctril (0.25 to 0.38 lb ai/A)	3-5 leaf sorghum. This mix may cause
or	temporary stunting and/or leaf burn to sorghum.
Buctril + atrazine (1.5 to 3.0 pt/A)	
GUARDSMAN plus	Make application preplant or postemergence on
Basagran (1.5 to 3.0 pt/A)	3-5 leaf sorghum. This mix may cause
or	temporary stunting and/or leaf burn to sorghum.
Laddok S-12 (1.33 to 2.33 pt/A)	
GUARDSMAN plus	Apply for burn down of emerged weeds in
Cyclone CF	minimum or no-tillage production system.
or	Application with Cyclone, Gramoxone or
Gramoxone Extra (1.5 to 3.0 pt/A)	Roundup must be made before crop emergence.
or	Landmaster or Fallow Master applications must
Roundup (glyphosate 0.5 to 4.0 lb ai/A)	be made 14 or more days before sorghum
or	seeding.
Landmaster BW	
or	
Fallow Master	

This labeling must be in the possession of the user at the time of the pesticide application.

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REGISTERED TRADEMARKS

BANVEL®, GUARDSMAN®, MARKSMAN®, and WEEDMASTER® Herbicide are registered trademarks of Sandoz Ltd.

Basagran® and Laddok® S-12 are registered trademarks of BASF Corporation.

Milo-Pro® is a registered trademark of Griffin Corporation.

Fallow Master™, Landmaster® BW and Roundup® are trademarks of Monsanto Agricultural Company.

Buctril® is a registered trademark of Rhone-Poulenc Ag Company.

Cyclone® CF and Gramoxone® Extra are registered trademarks of Zeneca, Inc.