

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



Office of Pesticide Programs

Mary B. Endres
Product Registration Manager
NuFarm, Inc.
150 Harvester Dr., Suite 200
Burr Ridge, IL 60527

NOV 21 2008

Subject: Amendment – Adding Mint to Label
Thistrol Herbicide
EPA Reg. No.: 71368-5

Dear Ms. Endres,

The Agency has received your application to add mint to the label the product described above, dated August 23, 2007. A tolerance for mint has been established, and was published November 12, 2008. The electronic version of the Federal Register notice of this tolerance may be accessed at <http://www.epa.gov/fedrgstr>.

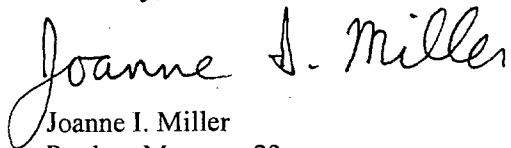
The label described above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, provided the following modifications are made:

1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Change the Signal Word to "Danger," wherever it appears on the label.
3. Add the following statement to the Signal Word box: "Si no usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)"
4. Per the acute toxicity review, revise the Hazards to Humans and Domestic Animals language to read: "Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing vapor or spray mist.
5. Add a First Aid box to the label, containing the following information:
 - a. If in Eyes
 - i. Hold eye open and rinse slowly and gently with water for 15 to 20 minutes
 - ii. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
 - iii. Call a poison control center or doctor for treatment advice.
 - b. If on Skin or Clothing
 - i. Take off contaminated clothing.
 - ii. Rinse skin immediately with water fo 15 to 20 minutes.
 - iii. Call a poison control center or doctor for treatment advice.
 - c. If Swallowed
 - i. Call a poison control center or doctor immediately for treatment advice.

- ii. Have a person sip a glass of water if able to swallow.
- iii. Do not induce vomiting unless told to do so by the poison control center or doctor.
- iv. Do not give anything by mouth to an unconscious person.
- d. If Inhaled
 - i. Move person to fresh air/
 - ii. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
 - iii. Call a poison control center or doctor for treatment advice.
- e. Hot Line Number: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact [insert appropriate number] for emergency medical treatment information.
- f. Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.
- g. Also include information which addresses the primary eye irritation Toxicity Category I. The following statements are some suggested types of information that could be included, if applicable, in the Note to Physician:
 - i. Technical information on symptomology
 - ii. Use of supportive treatments to maintain life functions
 - iii. Medicine that will counteract the specific physiological effects of the pesticide
 - iv. Company telephone number to specific medical personnel who can provide specialized medical advice.
- 6. Personal Protective Equipment (PPE): Use the following language: "Mixers, loaders, and other handlers must wear long-sleeved shirt, long pants, shoes plus socks, protective eyewear, and chemical-resistant gloves when mixing, loading, or exposed to the concentrate. A material that is chemical-resistant to this product is natural rubber. If you want more options, follow the instructions for category B, C, D, E, F, G, or H on an EPA chemical-resistant category selection chart. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."
- 7. Engineering Control Statements: Add the following statement: "Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard(WPS) for agricultural pesticides [40 CFR 170.240 (d)(6)]."
- 8. User Safety Recommendations: Revise to read, "Users should wash with plenty of soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE 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 put on clean clothing."
- 9. Environmental Hazards:
 - a. Add the following statement at the beginning of this section: "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 contaminate water when disposing of equipment washwaters or rinsate."
 - b. In the paragraph, "Avoid spray drift...", change "grape" to "grapes."
- 10. Agricultural Use Requirements:
 - a. Per the Worker Protection standard (WPS), a 24-hour restricted entry interval (REI) is required for chemicals classified as Acute Dermal Toxicity Category

- II. Technical grade MCPB has an acute dermal toxicity of Category II. Therefore, the REI for this product must be changed to 24 hours.
- b. Modify the early entry PPE to the following: Coveralls, shoes plus socks, and chemical-resistant gloves made of any waterproof material”
- 11. Under General Information, add the following language:
 - a. “Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles. A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial) can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.
 - i. Wind Speed: Do not apply at wind speeds greater than 10 mph at the application site.
 - ii. Droplet Size: Apply as a medium or coarser spray (ASAE standard 572).
 - iii. Release Height (Ground Application): Apply using a nozzle height of no more than 4 feet above the ground or crop canopy.
 - iv. Release Height (Aerial Application): Do not release spray at a height greater than 10 feet above the ground or crop canopy.”
- 12. The table entitled, “Recommendations for Apply Thistrol...,” must specify that it is for peas and not mint.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release of the product for shipment constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please submit one (1) copy of the final printed label before the product is released for shipment. If you have any questions, please contact Kathryn Montague (703-305-1243 or montague.kathryn@epa.gov).

Sincerely,

 Joanne I. Miller
 Product Manager 23
 Herbicide Branch
 Registration Division (7505P)

4/9

Thistrol® Herbicide

ACCEPTED
with COMMENTS
In EPA Letter Dated:

NOV 21 2008
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

71368-5

CONTROLS OR SUPPRESSES CANADA THISTLE AND
CERTAIN OTHER BROADLEAF WEEDS IN PEAS AND MINT
CONTAINS 4-(MCPB).

ACTIVE INGREDIENT:		
Sodium salt of 4-(2-Methyl-4-chlorophenoxy) butyric acid*	23.5%
OTHER INGREDIENTS:	76.5%
	TOTAL:	100.0%

*4-(2-Methyl-4-chlorophenoxy) butyric acid equivalent to 21.4% by weight or 2 pounds per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 71368-5
EPA EST. NO. 228-IL-1

MANUFACTURED BY
NUFARM INC.
BURR RIDGE, IL 60527



NET CONTENTS

071368-00005.20070703.mint



**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Harmful if swallowed. Avoid contact with skin, eyes or clothing. In case of contact, wash with plenty of water.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks. 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 CONTROL STATEMENTS:

When handlers use closed systems, enclosed cabs or aircraft 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

- Users 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.

ENVIRONMENTAL HAZARDS

Avoid spray drift as this product may injure susceptible crops and plants such as cotton, beans, grape, tomatoes, and ornamentals. (Coarse sprays are less likely to drift.) Do not use same spray equipment for other purposes unless thoroughly cleaned prior to use. Do not apply this product through any type of irrigation system.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. 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 during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

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 intervals. 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 12 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 over long-sleeved shirt and long pants, chemical resistant gloves such as nitrile, viton or barrier laminate, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and protective eyewear.

GENERAL INFORMATION

This product will provide safe and effective post-emergence control or suppression of Canada thistle in field peas. This product will also provide control or suppression of several annual broadleaf weeds such as common lambsquarters, pigweed, smartweed, sowthistle, and morningglories. Canada thistle is a particularly troublesome weed in pea fields, because it can reduce pea yields through competition, and because flower buds of the weed are difficult to remove from the harvested crop, resulting in loss of crop quality and reduced cash value to the grower.

This product will also provide suppression of field bindweed and other broadleaf weeds in mint that are listed on this label.

MINT

For suppression of field bindweed (*Convolvulus arvensis*) and other broadleaf weeds listed on this label: apply early post-emergence at the rate of 1 to 2 pints per acre (0.25 to 0.5 lb. acid equivalent/acre (lb. ae/A)) in sufficient water for coverage.

Do not harvest the mint within 40 days of the application.

Field bindweed suppression improves as the runners begin to exceed 6 to 8 inches in length. Mint oil yields may be reduced if applications are made when the crop is 6 inches or more tall. Mint may be discolored or twisted, but the production benefits gained from suppressing bindweed typically far exceeds the risk of mint injury.

For control of winter annual weeds listed, a fall application at 1 to 2 pints per acre (0.25 to 0.5 lb. ae/A) may be applied. A single spraying application works best for field bindweed suppression.

If tank mixed with other herbicides, test on a small area prior to full application (as the tank mixed application may result in significant damage to the mint).

Attention: Do not use this product if minor mint injury is unacceptable.

PEAS

MIXING AND HANDLING INSTRUCTIONS

Fill the spray tank 1/2 to 3/4 full with clean water. Begin agitation and add the recommended amount of this product. Add water to the spray tank to the desired level. Maintain sufficient agitation to ensure a uniform spray mixture during application. For ground application, apply in 20 to 40 gallons of water per acre, using a maximum spray pressure of 40 psi. For aerial application, apply in 5 to 10 gallons of water per acre.

RECOMMENDATIONS FOR APPLYING THIS PRODUCT

Peas are tolerant to this product from shoot emergence until about 3 leaf nodes before flowering. Typically, pea plants have developed 6 to 12 nodes at the normal time of Canada thistle treatment. Do not apply this product later than 3 nodes before pea flowering or after pea flower buds appear, as yield may be adversely affected. Most pea varieties may be safely sprayed with this product, however, temporary twisting of some pea varieties may follow application. Check with state weed extension specialist or local canning company representatives.

When using the tank mixture of this product plus BASAGRAN®, observe the more restrictive of the two labels for directions, precautions or limitations.

**RECOMMENDATIONS FOR APPLYING THISTROL® AND
THISTROL® + BASAGRAN® TANK MIXTURES**

Weed Species	THISTROL 2-3 pints		THISTROL 3-4 pints		THISTROL 4-6 pints		THISTROL 2 pints + BASAGRAN 1 pint		THISTROL 3 pints + BASAGRAN 1-1/2 pints	
	MAX LEAF STAGE	MAX WEED HEIGHT	MAX LEAF STAGE	MAX WEED HEIGHT	MAX LEAF STAGE	MAX WEED HEIGHT	MAX LEAF STAGE	MAX WEED HEIGHT	MAX LEAF STAGE	MAX WEED HEIGHT
Common Lambsquarters	2 - 3	3"	3 - 4	3" - 4"	4 - 5	4" - 5"	4	2"	8	3"
Pigweed	2 - 3	3"	3 - 4	3" - 4"	4 - 5	4" - 5"	5	2"	8	6"
Smartweed	2 - 3	3"	3 - 4	3" - 4"	4 - 5	4" - 5"	6	4"	8	6"
Morningglory	2 - 3	3"	3 - 4	3" - 4"	4 - 5	4" - 5"	-	-	-	-
Sowthistle	2 - 3	3"	3 - 4	3" - 4"	4 - 5	4" - 5"	4 - 5	4" - 5"	4 - 5	4" - 5"
Canada Thistle	-	-	-	4" - 10"	-	4" - Bud	-	4" - Bud	-	4" - Bud
Cocklebur	-	-	-	-	-	-	-	-	6	6"
Common Purslane	-	-	-	-	-	-	4	1"	6	2"
Common Ragweed	-	-	-	-	-	-	-	-	6	3"
Field Pepperweed	-	-	-	-	-	-	6	4"	10	8"
Giant Ragweed	-	-	-	-	-	-	-	-	4	6"
Henbit	-	-	-	-	-	-	-	-	4	2"
Jimsonweed	-	-	-	-	-	-	4	4"	6	6"
Marshelder	-	-	-	-	-	-	-	-	4	2"
Prickly Sida	-	-	-	-	-	-	6	3"	8	4"
Sheperdspurse	-	-	-	-	-	-	6	4"	10	8"
Velvetleaf	-	-	-	-	-	-	-	-	4	2"
Wild Mustard	-	-	-	-	-	-	6	4"	10	10"
Wild Radish	-	-	-	-	-	-	6	4"	10	10"
Wild Sunflower	-	-	-	-	-	-	-	-	4	5"

RESTRICTIONS AND PRECAUTIONS

- Do not spray peas under moisture stress.
- Do not spray peas when the air temperature exceeds 90° F.
- Do not spray peas later than 3 nodes before pea flowering or after pea flower buds appear.
- Do not exceed the maximum recommended rate of this product listed on this label.
- Do not feed treated peas or pea vines to livestock.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container in a dry secured storage area. Keep container tightly closed when not in use. Protect from freezing. If allowed to freeze, hold in warm temperature for several days and remix before using.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not use this product for purposes other than those recommended on the label.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV102899)

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BASAGRAN[®] is a registered trademark of BASF Corp.

NOT TO BE PART OF THE PRINTED LABEL
FOR INTERNAL REGULATORY USE ONLY

07/02/07 Created master EPA label from Nufarm 71368-5 printed label which refers to EPA Stamped Letter 12/09/1993 Rhone Poulenc 264-181.

07/03/07 Added mint for IR-4 to petition EPA.

