



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
7501-178

Date of Issuance:
FEB 1 2000

Term of Issuance:
Conditional

Name of Pesticide Product:
TOPS-MZ-CZ

NOTICE OF PESTICIDE:
 x Registration
 Reregistration
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Gustafson, LLC
1403 Preston Road, Suite 400
Plano, TX 75093

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product when the Agency requires all registrants of similar products to submit data.
2. Make the following labeling changes before you release the product for shipment:
 - a) Add the phrase "EPA Registration No. 7501-178,"
 - b) Under "Precautionary Statements," capitalize the "D" in "Do not breathe dust," and add the sentence "Causes moderate eye irritation."
 - c) Revise the first aid statement for eye exposure as follows, "If in Eyes: Hold eye open and rinse slowly and gently with water for 15- 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice."

Signature of Approving Official

Mary L. Waller

Mary L. Waller, Product Manager (21)
Fungicide Branch,
Registration Division (7505C)

Date:

FEB 1 2000

- d) Revise the first aid statement for dermal exposure, as follows: "If on Skin: Wash affected area with soap and water. Get medical attention."
- e) Revise the Personal Protective Equipment, as follows: "Handlers must wear: Long sleeved shirt and long pants, waterproof gloves, and shoes plus socks." No additional PPE are necessary.
- f) Delete the paragraph "When handlers use closed systems in a manner that meets the requirements listed in the WPS for agricultural pesticides, then handler PPE requirements may be reduced or modified as specified in the WPS."
- g) Delete the phrase "For terrestrial uses" from the second sentence in the Environmental Hazard section.
- h) Under "Storage and Disposal, Prohibitions," delete "Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment."
- i) Revise the PPE listed for early reentry workers in the Agricultural Use Requirements box as follows: coveralls over long sleeved shirt and long pants, waterproof gloves, and shoes and socks."
- j) Under Restrictions, change "on" to "in" in the third sentence so that it reads "Apply only in areas with adequate ventilation or dust collection and control equipment installed."

3. Submit one copy of the final printed label before you release your product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Sincerely,

Mary L. Waller

Mary L. Waller
 Product Manager (21)
 Fungicide Branch
 Registration Division (7505C)

Enclosure

ACCEPTED
with COMMENTS
In EPA Letter Dated:

2/1/00

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
7501-178

TOPS®-MZ-CZ

Potato Seed-Piece Treatment Fungicide

ACTIVE INGREDIENTS:

Thiophanate-methyl (dimethyl[(1,2-phenylene)bis(iminocarbonothioyl)]bis[carbamate])*	2.50%
A coordination product of zinc ion and manganese ethylene bisdithiocarbamate	6.00%
In which the ingredients are:	
Manganese ⁺⁺	1.2%
Zinc ⁺⁺	0.15%
Ethylene bisdithiocarbamate ion (C ₄ H ₆ N ₂ S ₄)	4.65%
Cymoxanil	1.00%
INERT INGREDIENTS:	90.50%
TOTAL	100.00%

*Also known as dimethyl 4,4'-0-phenylenebis[3-thioallophanate].

EPA Reg. No. 7501-RTI EPA EST. No.

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled or absorbed through the skin. do not breathe dust. Avoid contact with skin, eyes or clothing.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

If Inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

If on skin: Wash affected areas with soap and water.

If in Eyes: Flush with plenty of water. Call a physician immediately.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers (other than mixers and loaders) must wear: coveralls over long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter. Mixers and loaders must wear coveralls over long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, protective eyewear and chemical-resistant apron when mixing/loading. For exposures in enclosed areas, mixers and loaders must wear a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with

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an organic (OV) cartridge or canister with any N, R, P or HE prefilter; for exposures outdoors, a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

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.

When handlers use closed systems 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. 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 and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or 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. Dispose of all excess treated seed-pieces and seed packaging by burial away from bodies of water.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **STORAGE:** Keep container closed when not in use. Store in cool, dry location. Do not store in direct, hot sunlight.

PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal, or by cleaning of equipment. Do not reuse empty bag. Open dumping is prohibited.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment by tapping sides to dislodge residues. 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.



DIRECTIONS FOR USE

It is a violation of the Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of application. Do not use this product at higher than recommended rate. 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 regulation. **ENDANGERED SPECIES NOTICE:** Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

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 24 hours. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. 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, waterproof gloves, shoes plus socks, and protective eyewear.

RESISTANCE MANAGEMENT

NOTE: Systemic fungicides having a specific mode of action have been subject to development of resistant strains of fungi. Development of resistant strains cannot be predicted. Therefore, Gustafson LLC cannot assume liability for crop damage resulting from resistant strains of fungi. Consult with your local extension potato specialist for guidance and ways to control any possible resistant strains of fungi which may occur. This pesticide will not control bacterial diseases or other diseases not claimed on the label. Consult your local extension potato specialist for variety and treatment information, and for recommendations specific to your area on how to minimize the potential expression of seed-piece decay and potato diseases.

PESTS CONTROLLED

Potato Seed-Piece - Will prevent the spread of *Phytophthora infestans* (late blight) that may occur from seedborne infection or surface infestation resulting from seed-piece to seed-piece contact during the handling, cutting and planting process. TOPS-MZ-CZ will also help to reduce the transmission of the late blight fungus from the tuber to the above-ground plant. TOPS-MZ-CZ is not effective in protecting potato plants against airborne inoculum in potato fields. TOPS-MZ-CZ should not be used as a rescue treatment on seed lots with visual or known infections of *P. infestans*. TOPS-MZ-CZ also aids in the suppression of potato seed-piece diseases caused by *Fusarium* (dry rot), *Rhizoctonia* (black scurf and stem canker), and *Helminthosporium solani* (silver scurf).

RECOMMENDED APPLICATION

Apply at 0.75 to 1.0 pounds per 100 pounds of cut seed-pieces. Apply using a seed dust metering applicator so that cut seed-pieces are thoroughly covered with the mixture. Thoroughly clean and sanitize cutting machines, knives, trays, tables, barrels, equipment, trucks and planters before cutting and planting seed-pieces. Plant seed-pieces as soon as possible after cutting and treating in accordance with the recommendations of your local extension potato specialist.

RESTRICTIONS:

Do not use treated seed-pieces for food, feed, or fodder. Do not apply this product through any type of irrigation system. Apply only on areas with adequate ventilation or dust collection and control equipment installed. Do not substitute fans for ventilation in areas where application is made to cut potatoes.

NOTE: Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at recommended rates.

NOTE: This pesticide is to be sold ONLY in this original, unbroken package.

NOTICE - READ CAREFULLY

CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Treatment of highly mechanically damaged seed-pieces, or seed-pieces of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor.

As its sole express warranty, Gustafson LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, GUSTAFSON LLC SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, GUSTAFSON LLC NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL. Buyer assumes the responsibility to handle, use and store this product in accordance with the safety instructions and use directions contained on the label.

Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty, which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Gustafson LLC. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.

IN CASE OF AN EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL (800) 424-9300

Tops and Gustafson (logo) are Reg. TMs of Gustafson LLC

A quality product manufactured for :
Gustafson LLC
1400 Preston Road, Suite 400
Plano, Texas 75093
Questions? (972) 985-8877
Net Contents:
PATENT PENDING

TPMZCZ(S)993240