

100-889

11/16/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Trina Brodie  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300

NOV 16 2007

Subject: Mertect 340-F  
EPA Registration No. 100-889  
Your Label Amendment application dated July 20, 2007

Dear Ms. Brodie:

The amendment referred to above, submitted in connection with registration under FIFRA, sec. 3(c)(7)(A), has been reviewed and is acceptable provided that you submit a revised final printed label complying with the conditions as described herein, within 45 days of the date of this letter. A copy of the label stamped "Accepted With Comments" is included for your records.

1. On page 9 of the label, delete 'Diaporthe spp.'. To the fourth paragraph 'Follow the label...mixing', append the following restriction or a variation thereof: 'Mixing with other pesticides is limited to adequate physical compatibility and satisfactory phytotox test results'.
2. To the 'Pesticide Storage' section, include the following or a variation thereof: 'Repeated product freezing and thawing should be avoided. Shake or stir product, before use'.
  - A. Revise 'Pesticide Disposal' section, to read: 'Wastes resulting ... on site or at an approved waste disposal facility in accordance with Federal, State or local procedures under the Resource Conservation and Recovery Act'.
  - B. Section 'Container Disposal' requires the statement: 'If burned stay out of smoke'.

If you have any questions, please contact Bryant Crowe by phone at (703) 305-0025 or via email at [crowe.bryant@epa.gov](mailto:crowe.bryant@epa.gov).

Enclosure

Sincerely,

A handwritten signature in black ink that reads "Tony Kish".

Tony Kish  
Product Manager (22)  
Fungicide Branch  
Registration Division (7504P)

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MASTER

**Mertect® 340-F**

**Fungicide**

Flowable (Water-Dispersible Suspension)

Active Ingredient:

Thiabendazole: 2-(4-thiazolyl)benzimidazole\* ..... 42.3%

Other Ingredients: ..... 57.7%

Total: ..... 100.0%

\*4.1 lbs. active ingredient/gallon

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-889

EPA Est. 39578-TX-1

Product of India  
Formulated in the USA

SCP 889A-

2 gallons [Product ID 10078]  
Net Contents

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

NOV 16 2007  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

100-889

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<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p><b>HOT LINE NUMBER</b>                      For 24 Hour Medical Emergency Assistance (Human or Animal) or                      Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),                      Call  <b>1-800-888-8372</b></p>	

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if swallowed. Causes eye and skin irritation. Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment (PPE)**

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes plus socks

In addition to the above, handlers making application to mushroom houses using hand held sprayers must wear chemical resistant gloves.

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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.

### User Safety Recommendations

#### Users should:

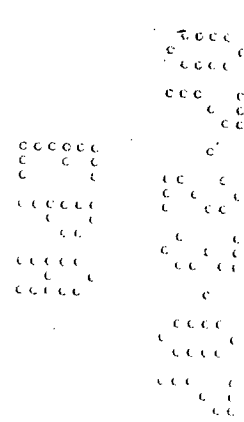
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticides get inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into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

### Environmental Hazards

This pesticide is toxic to fish. Do not apply when weather conditions favor runoff or drift from the target area. 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 by cleaning of equipment or disposal of waste.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.

**NOT FOR USE IN FORMULATING AGRICULTURAL PESTICIDES.**



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**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the fullest extent allowed by State law, Buyer and user agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the fullest extent allowed by State law, SYNGENTA or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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## DIRECTIONS FOR USE

It is a violation of federal law to use this product in a 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 during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Manual seed treatments are prohibited.

### 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 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.**

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## GENERAL INFORMATION

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Mertect 340-F is a systemic fungicide which aids in the control of many important plant diseases. If treatment is not effective following use of Mertect 340-F as recommended, a tolerant strain of fungus may be present. Consideration should be given to prompt use of other suitable non-benzimidazole fungicides. Mertect 340-F is not for use in formulating agricultural products.

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## CROP USE DIRECTIONS

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GENERAL – SHAKE OR STIR WELL BEFORE USE.

Clean equipment before using Mertect 340-F. **When Mertect 340-F is dispersed in water, the resulting suspension must be constantly agitated.** Avoid foaming.

Use the higher recommended rates under conditions of heavier disease pressure.

Compatibility information for Mertect 340-F with other chemicals is limited. Consult your supplier or agricultural experiment station for specific recommendations.

Do not apply this product through any type of irrigation system.

**Carrots – *Botrytis Cinerea* Gray Mold and *Sclerotinia sclerotiorum* (Sclerotinia Rot):** Dip carrots, before storage, for 5-10 seconds in a suspension containing 41 fl. oz. of Mertect 340-F per 100 gals. of water. Replenish the suspension when the volume is too low or when it becomes dirty.

The runoff and wastes from the dipping operation should not be discarded in a drainage which could contaminate public water systems.

**Citrus – Blue mold (*Penicillium digitatum*), Green mold (*Penicillium italicum*), and stem end rot (*Diplodia natalensis*):** Dip, flood, or spray harvested fruit with a suspension of Mertect 340-F in water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion. Rate will vary according to application method.

### Citrus Bin Drenches

Use 26 fl. oz. of Mertect 340-F in 100 gal of water to provide 1000 ppm TEZ. Citrus should be drenched for three (3) minutes. Use one (1) gallon of liquid per 1500-2000 lbs citrus or 100 gallons of liquid for about 30 bins. Avoid excessive foaming, use antifoam if needed.

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**Sprays**

Use 52-91 fl. oz. Mertect 340-F in 100 gal of water, wax/oil emulsions, or an aqueous dilution of wax/oil emulsion to provide 2000-3500 ppm of TBZ. Keep the mixture under constant agitation. Apply at a rate of one gallon per 8,000-10,000 pounds citrus fruit.

For sporulation control, apply 130 fl. oz of Mertect 340-F in 100 gal of water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion to provide 5000 ppm. Apply at a rate of one gallon per 8,000 – 10,000 lbs citrus fruit.

**Mushrooms (*Agaricus* spp.) – Dry Bubble (*Verticillium fungicola*), Wet Bubble (*Mycogone perniciosa*), Cobweb (*Dactylium dendroides*) and Green Mold (*Trichoderma* spp.):**

**Addition to mushroom supplements** – To a finished batch of mushroom supplement, add up to 0.1% active ingredient (by weight) of Mertect 340-F.

**Applying to mushrooms** - Mertect 340-F should be applied as a drench during normal watering operations. Apply at spawning, casing, and between breaks. Up to 8 fl. oz./1,000 sq. ft. can be applied at casing while a maximum of 4 fl. oz./1,000 sq. ft. can be applied at the other timings. Do not apply more than 20 fl. oz./1,000 sq. ft. of Mertect 340-F per crop unless a supplement containing Mertect 340-F has been used. If the supplement contains thiabendazole, refer to table below for maximum amount that can be applied to a crop. Do not apply within 12 hours prior to harvest.

Lbs supplement* per 8,000 sq. ft.	Maximum amount of Mertect 340-F per 1,000 sq. ft. per crop (fl. oz.)
800	17
1200	15
1400	14.5
1800	13
2200	11
2400	9

\*Assumes at maximum rate of 0.1% thiabendazole

**Note:** If you are unsure if the mushroom supplement that you are using contains thiabendazole, contact the manufacturer of the mushroom supplement.

**Ornamental Bulbs and Corms – *Fusarium* Basal Rot and *Penicillium* Blue Mold:**

Clean and treat bulbs or corm within 24-48 hours of digging. Prepare suspension of 30 fl. oz. of Mertect 340-F per 100 gals. of water. Submerge stock completely in dipping suspension. Suspension temperature should be 55-75°F (13-24°C). Discard suspension (1) when it becomes dirty, (2) after using five times, or (3) after 24 hours, whichever occurs first.

**Fusarium (Bulbs and Corms):** Dip bulbs 15-30 minutes, corms 15 minutes.



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**Blue Mold (Bulbs):** Dip 10-15 minutes.

After treatment, dry bulbs or corms in a shaded, well-ventilated area. Curing or retarding may precede or follow treatment.

**Potato – Fusarium Tuber Rot:** Mist unwashed tubers on a conveyor line, with tumbling action, entering storage with 0.42 fl. oz. of Mertect 340-F to each 2,000 lbs. of tubers in sufficient water for complete coverage. If an additional treatment is necessary before shipping, mist the tubers at the same rate or dip the tubers for 20 seconds in a solution containing 0.42 fl. oz. of Mertect 340-F per gal. of water. Do not treat seed potatoes after cutting.

Mertect 340-F for potatoes should be used as part of an Integrated Management Program, which includes prevention of bruising during harvest and maintaining proper storage temperature and relative humidity. Neither cultural practices nor chemical measures will prevent *Fusarium* infection if potatoes are damaged or improperly stored.

**Pome Fruit (Apples and Pears) – Blue Mold Rot, Bull’s Eye Rot, and Gray Mold (Nest Rot, Cluster Rot), Stem End and Neck Rot:** Dip, flood, or spray harvested fruit with a suspension of 16 fl. oz. of Mertect 340-F in 100 gals. of water. Do not treat for over 3 minutes. Treat apples only before and after storage for maximum decay control. Treat pears once.

**Sweet Potato “Seed Roots” – Black Rot, Scurf, and Foot Rot:** Dip the seed roots in a suspension containing 8 fl. oz. of Mertect 340-F per 7.5 gals. of water (107 fl. oz. per 100 gals.). Treat the seed roots for 1-2 minutes and plant immediately. Discard the suspension when the volume is too low or when it becomes dirty. Do not use the treated roots for food or feed.

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## SEED TREATMENT

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Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigor and poor quality, except for the purpose of curative control of existing disease pests, may result in reduced germination and/or reduction of seed and seedling vigor. Treat using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of seed before committing the total seed lot to a selected seed treatment. Due to seed quality and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of carry-over seed or propagating material for all crop seed.

### Mixing Procedures

Apply Mertect 340-F as a water-based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the

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recommended amount of Mertect 340-F into the required amount of water for the slurry treater and dilution rate to be used. Follow the manufacturer application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment. Allow seed to dry before bagging.

Federal law requires that bags containing treated seed shall be labeled with the following information: "This seed has been treated with thiabendazole fungicide. Do not use for feed, food, or oil purposes. Store away from feed and foodstuffs. Use an EPA-approved dye or colorant that imparts an unnatural color to the seed."

Mertect 340-F is recommended for protection against pod and stem blight (*Diaporthe* spp. and *Phomopsis* spp.) on soybean seed to improve germination and early season seedling health. For protection against other seed and soil-borne diseases, it is recommended that a co-fungicide such as Syngenta Apron® XL LS + Maxim® 4FS, or an ApronMAXX® brand fungicide, be used at EPA registered label rates and tank mixed in combination with Mertect 340-F. Consult the label for appropriate use rates and follow all use instructions for the products.

Follow the label directions for the most restrictive of label precautions and limitations. This product cannot be mixed with any product containing a label prohibition against such mixing.

**Soybean:** Utilized as a seed treatment for protection against seed borne and early season seedling pod and stem blight on soybean: Apply Mertect 340-F at the rate of 0.08 to 0.16 fl. oz. per 100 lbs. of seed.

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## STORAGE AND DISPOSAL

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Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

### Pesticide Storage

Store Mertect 340-F in a cool, dry place away from food, drink, and animal feeding stuffs. Do not store below 32°F (0°C).

### 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 alternatives allowed by state and local authorities.

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**FOR BULK AND MINIBULK CONTAINERS:  
CONTAINER DISPOSAL**

Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

**CONTAINER PRECAUTIONS**


Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

**REFILL ONLY WITH MERTECT 340-F**

The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Mertect 340-F will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.**

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Mertect®, Apron®, ApronMAXX®, Maxim®, the Syngenta logo, and the CP FRAME  are trademarks of a Syngenta Group Company

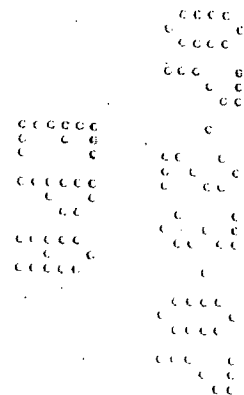
©2006 Syngenta

For non-emergency (e.g., current product information), call  
Syngenta Crop Protection at 1-800-334-9481.

Product of India  
Formulated in the USA

Manufactured for  
Syngenta Crop Protection, Inc.  
Greensboro, North Carolina 27409  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 889A-



CONTAINER LABEL

**Mertect® 340-F**

**Fungicide**

Flowable (Water-Dispersible Suspension)

Active Ingredient:	
Thiabendazole: 2-(4-thiazolyl)benzimidazole* .....	42.3%
Other Ingredients:	57.7%
Total:	100.0%

\*4.1 lbs. active ingredient/gallon

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See directions for use inside booklet.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

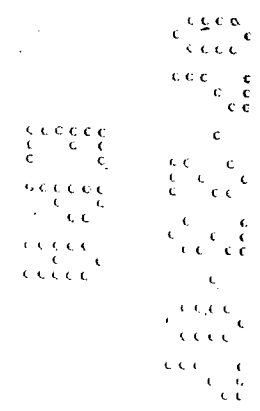
EPA Reg. No. 100-889

EPA Est. 39578-TX-1

Product of India  
Formulated in the USA

SCP 889A-

2 gallons  
Net Contents



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<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b> For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

Harmful if swallowed. Causes eye and skin irritation. Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after handling.

**Environmental Hazards**

This pesticide is toxic to fish. Do not apply when weather conditions favor runoff or drift from the target area. 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 by cleaning of equipment or disposal of waste.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean-up procedures and disposal of wastes.

**NOT FOR USE IN FORMULATING AGRICULTURAL PESTICIDES.**

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## STORAGE AND DISPOSAL

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Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

### Pesticide Storage

Store Mertect 340-F in a cool, dry place away from food, drink, and animal feeding stuffs. Do not store below 32°F (0°C).

### 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 alternatives allowed by state and local authorities.

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SCP 889A-

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