



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

FEB 13 1998

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Lee Tharrington  
Registrations Assistant  
Micro Flo Company  
P.O. Box 5948  
Lakeland, FL 33807

**SUBJECT:** Labeling Amendment and New Basic Formula  
Thiram 75WP Fungicide  
EPA Reg. No. 51036-53  
Your Submission Dated November 5, 1998

Dear Mr. Tharrington:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the conditions below:

1. The NET CONTENTS statement is missing from the label. This statement is required on all labels or on the container of the pesticide. The preferred location is the bottom of the front panel immediately above the company name and address, or at the end of the label text. Net contents must be expressed in conventional American units of fluid ounces, pints, quarts, gallons and pounds. The net contents must also be expressed in the largest suitable unit, e.g., "1 pound 10 ounces" rather than "26 ounces". In addition to American units, net contents may be expressed in metric units. [40 CFR 156.10(d)]
2. Modify the ENVIRONMENTAL HAZARDS section to include the following statement: "Do not contaminate water by cleaning of equipment or disposal of wastes."

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. Please submit one copy of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records.

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In addition, there is no objection to the use of the Basic formulation request (Confidential Statement of Formula) dated November 5, 1997 referenced in your letter of the above date. The amendment has been inserted in the file for the subject product. Please note that this formulation supersedes all previously approved formulations.

If you have any questions, then please contact Terri Stowe of my staff at (703) 305-6117.

Sincerely,

(S)  
Cynthia Giles-Parker  
Product Manager (22)  
Fungicide Branch  
Registration Division (7505C)

Enclosure

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# THIRAM 75WP FUNGICIDE

## ACTIVE INGREDIENT:

Thiram (Tetramethylthiuram disulfide).....75.0%

INERT INGREDIENTS:.....25.0%

TOTAL:.....100.0%

KEEP OUT OF REACH OF CHILDREN

## CAUTION

Si 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.)

## STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching the back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

IF ON SKIN: Remove contaminated clothing and wash affected areas with soap and water. Get medical attention if irritation persists. Wash contaminated clothing before reuse.

IF IN EYES: Flush eyes with plenty of water. Get medical attention if irritation persists.

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.

EPA Reg.No. 51036-53

EPA Est.No. 51036-GA-1

Manufactured By:  
MICRO FLO COMPANY  
P.O. BOX 5948  
LAKELAND, FL 33807

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Causes eye and skin irritation. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Wash with soap and water after handling. Avoid inhaling spray mist. Do not use or store near food or feed.

Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

The consumption of alcoholic beverages increases the toxic effects of Thiram.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- \* Long-sleeved shirt and long pants
- \* Waterproof gloves
- \* Shoes plus socks
- \* Chemical-resistant headgear for overhead exposure

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

FEB 13 1998

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

51036-53

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Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining Personal Protection Equipment (PPE). If no such instruction 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.
- \* 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 or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

GENERAL PRODUCT INFORMATION

Thiram 75WP Fungicide is a broad-spectrum fungicide for plant disease control in the culture of Apples, Peaches, and Strawberries. Thiram 75WP Fungicide is a broad-spectrum fungicide for use on Non-commercial Turf (parks, golf courses, rights-of-way, commercial landscapes, etc.) to control Dollar Spot, Brown Patch and Fusarium Patch. When used as Seed Protectant, Thiram 75WP Fungicide will usually increase crop stands and yields by reducing seedling losses from seed decay, damping-off or seedling blights.

Micro Flo Company's recommendations for the use of this product are based upon tests believed to be reliable. FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, OR ILLEGAL RESIDUES.

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.

CHEMIGATION PROHIBITION

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

GENERAL RECOMMENDATIONS

Be sure spray equipment is clean before use. If it is contaminated with any material, crop injury or sprayer clogging may result. Calibrate spray

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equipment before use.

- For agricultural foliar applications use recommended rates for dilute, concentrate and aerial applications. Ground application is preferred, especially when full canopy of foliage exists. For dilute application, use Thiram 75WP Fungicide at the recommended rate listed in the "per 100 gallons" column of the Specific Applications table. For concentrate ground application, apply the recommended rate listed in the "per acre" column of the Specific Applications table in a minimum of 20 gallons per acre. For aerial application, apply the recommended rate listed in the "per acre" column of the Specific Applications table in a minimum of 10 gallons per acre.

Applications of Thiram 75WP Fungicide are most effective when made before infection periods. Under low disease conditions, minimum label rates should be used; however, maximum label rates and shortened spray schedules are recommended for severe or threatening disease conditions. If you are not familiar with such conditions, get advice from your state agricultural extension service.

IMPORTANT: When spraying, thorough coverage is necessary to provide good disease control. Addition of a spreader/sticker to the finished spray mixture may improve coverage. Make fresh spray mixtures for each application.

#### MIXING INSTRUCTIONS

To mix, fill the spray tank about 2/3 full of water, and with agitator running, slowly sift in the recommended amount of Thiram 75WP Fungicide. Finish filling the tank with water and continue agitation until thoroughly mixed. Continue agitation and apply immediately.

#### AGRICULTURAL APPLICATIONS (FOLIAR):

##### 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 (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.

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:

- \* Long-sleeved shirt and long pants
- \* Waterproof gloves
- \* Shoes plus socks
- \* Chemical-resistant headgear for overhead exposure

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SPECIFIC APPLICATIONS FOR THIRAM 75WP FUNGICIDE

FRUIT CROPS	DISEASES	POUNDS THIRAM 75WP FUNGICIDE		DIRECTIONS FOR USE
		per acre	per 100 gal	
APPLES*	Apple Blotch (Phyllosticta solitaria) Apple Scab (Venturia inaequalis) Bitter Rot (Glomerella cingulata) Black Pox (Helminthosporium papulosum) Black Rot on fruit and foliage (Botryosphaeria obtusa) Brook's Spot (Mycosphaerelia poml) Bull's Eye Rot (Pezicua malicorticis) (Pacific Northwest Only) Fly Speck (Schizothyrium poml) Gray Mold Rot (Botrytis cinerea) Sooty Blotch (Gloeodes pomigana) White Rot (Botryosphaeria dothidea)	5.2 to 6.8 lbs	1.3 to 1.7 lbs <sup>(1)</sup>	Apply at pre-bloom, calyx, early cover sprays and late cover sprays.
	Cedar Apple Rust, Quince Rust (Gymnosporangium spp.)	5.2 to 6.8 lbs	1.3 to 1.7 lbs <sup>(1)</sup>	Apply at pre-bloom, calyx and first cover. Additionally, apply 2.6 lbs/A (0.65 lb/100 gal) at bloom.

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FRUIT CROPS	DISEASES	POUNDS THIRAM 75WP FUNGICIDE		DIRECTIONS FOR USE
		per acre	per 100 gal	
PEACHES*	Brown Rot Blossom Blight and Fruit Rot (Monlinia spp.)	3.9 to 5.1 lbs	1.3 to 1.7 lbs <sup>(2)</sup>	For Blossom Blight, apply at 3-4 day intervals during bloom to protect blossoms. For Fruit Rot, apply at petal-fall, two weeks after petal-fall and in cover sprays at 7 day intervals if rot is apparent on green fruit. Do not apply within 7 days of harvest.
	Peach Leaf Curl (Taphrina deformans)	3.9 to 5.1 lbs	1.3 to 1.7 lbs <sup>(2)</sup>	Apply dormant applications post-harvest in late fall and/or in late winter prior to bud swell, at bloom and petal-fall.
	Rhizopus Rot (Rhizopus spp.)	3.9 to 5.1 lbs	1.3 to 1.7 lbs <sup>(2)</sup>	Apply at petal-fall, two weeks after petal-fall and in cover sprays at 7 day intervals if rot is apparent on green fruit. Do not apply within 7 days of harvest.

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FRUIT CROPS	DISEASES	POUNDS THIRAM 75WP FUNGICIDE		DIRECTIONS FOR USE
		per acre	per 100 gal	
PEACHES* (cont'd)	Peach Scab (Cladosporium carpophilum)	3.9 to 5.1 lbs	1.3 to 1.7 lbs <sup>(2)</sup>	Apply at petal-fall and repeat 3 to 6 times at 10 to 14 day intervals as needed. Do not apply within 7 days of harvest.
STRAW-BERRIES*	Gray Mold (Botrytis cinerea)	3.4 to 4.4 lbs	1.7 to 2.2 lbs <sup>(3)</sup>	Broadcast 3 to 5 applications at 10 day intervals per crop cycle <sup>(4)</sup> beginning at early blossom stage. Good coverage of strawberry buds, blossoms and developing fruit is required for best results. Do not apply within 3 days of picking.

<sup>(1)</sup> Based on dilute sprays of 400 gallons per acre.

<sup>(2)</sup> Based on dilute sprays of 300 gallons per acre.

<sup>(3)</sup> Based on dilute sprays of 200 gallons per acre.

<sup>(4)</sup> Crop cycle is defined as pre-bloom through harvest.

\*Not for use in California.

DO NOT graze or feed cover crops from treated orchards.

DO NOT rotate treated crops with crops other than those with registered Thiram uses.

#### NON-COMMERCIAL TURF APPLICATIONS:

Not for use on turf being grown for sale or other commercial use such as sod, or for commercial seed production, or for research purposes.  
Not for use on residential lawns or turf.

Thiram 75WP Fungicide prevents infestation of common turf diseases such as Dollar Spot, Brown Patch and Fusarium Patch during the summer growing season and Snow Mold during the cool weather seasons. When used at curative rates,



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Thiram 75WP Fungicide will cure diseased turf infected with Dollar Spot, Brown Patch and Fusarium Patch.

SPECIFIC APPLICATIONS FOR THIRAM 75WP FUNGICIDE

TURF	DISEASES	OUNCES THIRAM 75WP FUNGICIDE per 1000 square feet	DIRECTIONS FOR USE
NON-COMMERCIAL TURF*	Dollar Spot (Sclerotinia homeocarpa) Brown Patch (Rhizoctonia Blight) (Rhizoctonia solani)	Preventative Rate: 2.5 to 3.0 oz	Apply recommended rate in 5 to 10 gallons water / 1000 sq. ft. beginning in early spring <u>before</u> disease symptoms appear. Repeat at 7 to 10 day intervals as needed when environmental conditions favor disease development. Do not apply more than 40 oz per 1000 sq. ft. during the summer growing season.
		Curative Rate: 4.5 to 5.0 oz	Apply recommended rate in 5 to 10 gallons water / 1000 sq. ft. after disease symptoms first appear. Repeat at 7 to 10 day intervals as needed. Do not apply more than 40 oz per 1000 sq. ft. during the summer growing season.

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TURF	DISEASES	OUNCES THIRAM 75WP FUNGICIDE per 1000 square feet	DIRECTIONS FOR USE
NON-COMMERCIAL TURF* (cont'd)	Fusarium Patch (Fusarium nivale) (Pink Snow Mold and Gerlachia Patch)	Preventative Rate: 8.0 oz	Apply recommended rate in 2 to 5 gallons water / 1000 sq. ft. in late fall immediately before expected permanent snow cover.
		Curative Rate: 3.0 oz	As a follow-up to the late fall application, apply in spring after snow melts and runoff has ended.

DO NOT graze or feed treated turf.

\*Not for use in California

#### SEED PROTECTANT APPLICATIONS:

For control of damping-off, seed decay, seedling blights, covered kernel smut of sorghum and loose smut and bunt of wheat, etc., apply Thiram 75WP Fungicide at recommended dosages as a dry treatment or as a water-based slurry. Apply with other registered seed treatment insecticides and fungicides through commercial slurry or mist-type seed treatment equipment.

Treated seed must not be used for or mixed with food or animal feed, or processed for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seeds beyond planting time. Seed treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. Labels attached to treated seed must state: "Treated seed must not be used for or mixed with food or animal feed, or processed for oil." and "Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water."

#### THIRAM 75WP FUNGICIDE SEED PROTECTANT DOSAGE RATES

TYPE OF SEED*	OUNCES THIRAM 75WP FUNGICIDE per 100 lbs
Barley	2.7
Beans (dry and succulent)	1.3
Beans (Lima)	2.2
Beans (snap)	1.3
Beets (garden)	5.3
Canola	4.3

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TYPE OF SEED*	OUNCES THIRAM 75WP FUNGICIDE per 100 lbs
Cantaloupe, Cucumber, Pumpkin, Squash, Watermelon	3.0
Castor beans	3.0
Chicory	3.5
Conifers	21.5
Corn (field and sweet)	2.0
Cottonseed (reginned, fuzzy and acid-delinted)	3.0
Cowpeas	1.3
Eggplant	4.0
Flax	3.5
Grasses	5.3
Legumes (small-seeded)	5.3
Lentils	2.0
Millet	2.7
Oats	2.2
Okra	4.0
Onions	4.0
Peanuts (shelled and unshelled)	3.0
Peas	2.0
Rice	2.9
Rye	2.5
Safflower	2.7
Sesame	2.0
Sorghum	1.8
Soybeans	2.2
Sugar beets	5.3
Sunflowers	5.4
Triticale	2.2
Tomatoes	4.0
Wheat	2.2

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TYPE OF SEED*	OUNCES THIRAM 75WP FUNGICIDE per 100 lbs
Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Collards, Endive, Kale, Kohlrabi, Lettuce, Mustard, Peppers, Radish, Spinach, Swiss Chard, Turnip	5.3
Ornamental flower seeds, Ornamental foliage plants in the families Araliaceae (scheffleras), Aracea (philodendrons) and Palmacea (palms)	5.4

\*Not for use in California.

#### STORAGE AND DISPOSAL

##### Pesticide Storage:

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

Store unused product in original container only. Store in a cool, dry area preferably locked and out of the reach of children and animals. Not for the use or storage in or around the home. Protect from excess heat.

##### Pesticide Disposal:

Pesticide waste 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 the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

##### Container Disposal:

Completely empty container into application equipment. Then dispose of the empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### TERMS OF SALE OR USE

On purchase of this product, buyer and user agree to the following conditions:

**Warranty:** Micro Flo Company makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

**Damages:** Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

For Emergencies Involving a Spill, Leak, Fire, Exposure, or Accident, contact: CHEMTREC at (800)-424-9300.