

PM 23 45728-1

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JUN 17 1994

Mr. Paul S. Larson
UCB Chemicals Corporation
5505-A ROBIN HOOD ROAD
Norfolk, VA 23513

Dear Mr. Larson:

Subject: Thiram Technical
EPA Registration No. 45728-1
Application Dated June 3, 1994, Amended Labeling
to Comply with EPA PR Notices 93-10 and 94-1 and
Nonsubstantive Changes To Label and Technical
Bulletin

The proposed subject labeling amendments have been reviewed and are acceptable under the Federal Insecticide, Fungicide and Rodenticide Act as amended provided that you:

- o Submit five (5) printed copies of your final printed labeling before you release the product for shipment under the subject labeling.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section 5(e). Your release for shipment of the product constitutes acceptance of this condition.

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

enclosure

E.wilson:Diskette ABC12:06-17-94

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DIRECTIONS FOR USE

It is a violation of Federal (U.S.A.) law to use this product in a manner inconsistent with its labelling.

Only For Formulation Into EPA-Approved Fungicide, Seed Treatment, and Animal Repellent End-Use Product(s) For the Following Use(s):

- (A) Agricultural Fruit and Vegetable Fungicide (including Apples, Bananas, Celery, Peaches, Onions (Dry Bulb), Strawberries, Sweet Potatoes (preplant dip only), and Tomatoes);
- (B) Commercial or Professional Use Turf Fungicide;
- (C) Agricultural or Commercial Ornamental Fungicide (including Azaleas, Greenhouse and Nursery Cuttings, Gladiolus, Grasses, Hyacinths, Iris, Lilies, Narcissus, Orchids, and Tulips);
- (D) Seed Treatment (including Barley, Beans (Dry and Succulent), Beans (Lima), Beets (Table), Broccoli, Brussels Sprouts, Cabbage, Cantaloupe, Carrots, Castor Beans, Cauliflower, Collards, Conifers, Corn (Field), Corn (Sweet), Cotton, Cowpeas, Cucumbers, Eggplant, Endive, Flax, Grasses, Kale, Kohlrabi, Legumes (Small-Seeded), Lentils, Lettuce, Millet, Mustard, Oats, Okra, Onions, Peanuts, Peas, Peppers, Pumpkin, Radish, Rice, Rye, Safflower, Sesame, Sorghum, Soybeans, Spinach, Squash, Sugar Beets, Sunflowers, Swiss Chard, Tomatoes, Turnips, Watermelon, and Wheat);
- (E) Residential (Homeowner) Fungicide (including Bulb Dust, Flower Seeds, Greenhouse and Nursery Cuttings, Lawns/Grasses, and Pruning Paints); and,
- (F) Animal Repellents.

This product may be used to formulate products for any additional uses not listed on the MP label if the formulator, user group, or grower has complied with U.S. EPA data submission requirements regarding the support of such uses.

Refer to technical bulletin THIRAM-01 for formulating instructions. A copy of this bulletin can be obtained by writing UCB at the address on the right panel.

UCB THIRAM TECHNICAL

DESCRIPTION

This Technical Bulletin is directed to formulators and their personnel to provide adequate information on the product. This information should be considered the basis for development and utilization of safe and proper handling procedures. For any further information, contact UCB Chemicals Corporation.

IMPORTANT

Consult with UCB or the Environmental Protection Agency to obtain information on currently registered uses for THIRAM as they are subject to change.

Subsequent formulators are responsible for providing documentation to support any required registration of their product(s).

Failure to properly register with the Environmental Protection Agency any pesticide product formulated with this product is a violation of the Federal Insecticide, Fungicide and Rodenticide Act.

CHEMICAL FORMULA

$[(CH_3)_2NCS_2]_2$

MOLECULAR WEIGHT

240.44

PHYSICAL AND CHEMICAL PROPERTIES

- <u>Bulk Density</u> (g/cc)	0.3 (not tamped) 0.35 (tamped)
- <u>pH</u> (in 4% aqueous suspension)	6.5
- <u>Appearance</u>	Creamy-white powder
- <u>Assay</u> (*) [Tetramethylthiuram disulfide (min.)]	98.5%
- <u>Water Content</u> (%) max.	0.3
- <u>Odor</u>	Nil
- <u>Melting Point</u>	Min. 135°C
- <u>Solubility</u> (in H ₂ O)	Soluble in part
- <u>Particle size distribution</u> (screen under water flow)	
on 0.210 mm sieve (65 mesh) (%) max.	--
on 0.147 mm sieve (100 mesh) (%) max.	0.1
on 0.044 mm sieve (325 mesh) (%) max.	0.75
- <u>Wettability</u> in 5 x WHO water (**)(in min.) max.	3

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- (*) Method of D.G. Clarke and co-workers applied to 0.5 g of sample first reduced by Na_2S in tetrahydrofuran media. Method available upon request.
- (**) Time expressed in minutes which are required so that 5 g of sample disposed onto 100 ml of water (hardness: 1700 mg/l as CaCO_3) are completely wetted.

PACKAGING

55 Pounds net multi-ply paper bags (inner polyethylene ply).

CHEMICAL REACTIVITY

Mineral acids break down THIRAM with evolution of carbon disulfide and hydrogen sulfide.

FLAMMABILITY AND FIREFIGHTING

This product is considered noncombustible. However, under fire conditions, it may decompose and emit toxic fumes of nitrogen and sulfur oxides.

Use standard extinguishing media - water, carbon dioxide, dry chemicals, or foam. When there is a potential for exposure, wear a self-contained breathing apparatus in positive pressure mode. In addition, impervious clothing should be worn.

SAFETY MEASURES, FIRST AID

- Wear rubber gloves, inhalation mask, safety glasses, and coverall.
- Provide adequate ventilation.
- Keep out of reach of children and away from food, drink, and animal feeding stuffs.
- Wash face and hands prior to taking food.
- Do not drink alcohol. When taken simultaneously, THIRAM causes violent nausea, vomiting, and collapse.
- Store at normal temperature, away from source of ignition.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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THIRAM TECHNICAL

For Formulating Into End-Use Products

Active Ingredient:	
Thiram (Tetramethylthiuram Disulfide)	98.5%
Inert Ingredients:	1.5%
	Total 100.0%

Keep Out of Reach of Children
Precautionary Statements
Hazards to Humans and Domestic Animals
WARNING

Causes substantial but temporary eye injury. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed. Use with adequate ventilation. Avoid breathing of dust. Consumption of alcoholic beverages increases the toxic effect of Thiram. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. This product may cause allergic reactions.

STATEMENT OF PRACTICAL TREATMENT

If in eyes: Flush with plenty of water for at least 15 minutes. Call a physician. **If swallowed:** Drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Avoid alcohol. Call a physician or Poison Control Center. **In case of contact:** Wash skin with plenty of soap and water.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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STORAGE AND DISPOSAL

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

STORAGE: Store in a cool dry place in the original container.

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 the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. 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.

NOTICE -- READ CAREFULLY LIMITED WARRANTY STATEMENT

UCB Chemicals Corporation 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. UCB neither makes, nor authorizes any agent or representative to make any other warranty of FITNESS or MERCHANTABILITY, guarantee or representation, expressed or implied, concerning the use of this product. In the event of any breach of this limited warranty, UCB shall not be liable for consequential damages. Further, UCB disclaims any liability for the unsupported (unlisted) uses that disclaim liability, including crop and property damage or failed efficacy resulting from the use of a formulated product containing this product.

Net Wt. 25kg (55.1 lbs.)

EPA Reg. No. 45728-1

EPA Est. 32557-BL-1



UCB Chemicals Corporation
 5505-A Robin Hood Road
 Norfolk, Virginia 23513
 (804) 857-8610

ACCEPTED
 with COMMENTS
 In EPA Letter Dated

U010 0494V

JUN 17 1994

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

45728-1