

U.S. DEPARTMENT OF AGRICULTURE  
FEDERAL REGISTER

SEP 22 1987

THIRAM (Tetramethylthiuram Disulfide)  
EPA Reg. No. 46588-1

registered under EPA Reg. No.  
46588-1

ACTIVE INGREDIENT:  
THIRAM (Tetramethylthiuram Disulfide) 98%  
INERT INGREDIENTS 2%  
Total 100%

### TETRAMETHYLTHIURAM DISULFIDE

## React-Rite™ TMTD

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING!**

PRECAUTIONARY STATEMENTS:  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Use with adequate ventilation. In case of contact, flush with plenty of water. For eyes — get medical attention. Consumption of alcoholic beverages increases the possibility of harm.

**ENVIRONMENTAL HAZARD:**  
This pesticide is toxic to fish. Do not apply directly to water.

#### STORAGE AND DISPOSAL

**PESTICIDE DISPOSAL:**  
Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to Federal or approved State procedures under Subtitle C of the Resource Conservation and Recovery Act.

**CONTAINER DISPOSAL:**  
Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum cannot be reused, dispose of in the same manner.

**DIRECTIONS FOR USE:**  
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For use by commercial fungicide formulators. For further information, please refer to technical data bulletin, which is available upon request.

**REACTOR PRODUCTS, INC.** makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Formulators who use this product are responsible for providing data for registration.

EPA Reg. No. 46588-1                      EPA Est. No. 46588-GA-01

NET WEIGHT = 100 Pounds

**MANUFACTURED BY: REACTOR PRODUCTS, INC.**  
Old Summerville Road, Armuchee, GA 30105



reactor products, inc.

P.O. BOX 128  
ARMUCHEE GA 30105

TELEPHONE

(404) 235-8294

(404) 235-8295

(404) 235-8296

## React-Rite™ TMTD

# Product Bulletin

### Use Precautions

The following precautions should be observed in handling and using React-Rite™ TMTD:

In handling React-Rite™ TMTD the usual precautions applicable should be observed. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Do not take internally. In case of contact, flush skin or eyes with plenty of water. Wash thoroughly after handling.

Consumption of alcohol should be avoided while handling React-Rite™ TMTD as skin irritation and discomfort may occur.

React-Rite™ TMTD should be stored in closed containers under cool and dry conditions. React-Rite™ TMTD has shown excellent storage stability in excess of two years. Do not contaminate water, food or feed by storage or disposal. Do not reuse empty containers.

Pesticide or rinsate that can not be used should be disposed of in a landfill approved for pesticides. Containers should be disposed of in an incenerator or landfill approved for pesticide containers. Consult federal, state and local disposal authorities for approved alternative disposal procedures.

### Personal Protective Equipment

Wear goggles or eye shield when handling to protect eyes. Use protective barrier cream on exposed skin areas. Wear gloves and protective clothing when handling or using React-Rite™ TMTD to minimize skin contact. Do not inhale dust - wear a respirator if necessary. Launder outer garments if exposed to dust or spills. Discard footwear which can not be decontaminated.

# Product Bulletin

## Recommendations For Use

### Seed Protectant Formulations:

Formulations of seed protectants made with React-Rite™ TMTD will usually increase stands and yields by reducing seed losses due to decay, damping off and seedling blights caused by seed borne and soil borne organisms.

The total concentration of React-Rite™ TMTD in seed protectant formulations may range from 40% to 60%. Inert ingredients may include talc, pyrophyllite, pigments, surfactants, solvents or dust control agents. In some cases it may be advantageous to include a small amount of insecticide to the formulation to aid in the control of insects.

### Fungicide Formulations:

Fungicide formulations made with React-Rite™ TMTD are valuable in the control of certain fungus diseases of apples, peaches, tomatoes, celery, bananas and strawberries. The total concentration of React-Rite™ TMTD in fungicide formulations may range from 50% to 75%. Inert ingredients may include talc, pyrophyllite, pigments, surfactants, solvents or dust control agents.

## Product Bulletin

### First Aid Procedures

Contact with eyes: Flush eyes with plenty of water immediately for at least 15 minutes. Seek medical attention immediately.

Contact with skin: Wash exposed areas of skin with soap and warm water after handling or using React-Rite™ TMTD. Contaminated clothing including footwear should be thoroughly cleaned before reuse.

Inhalation: Remove to fresh air.

Ingestion: Induce vomiting as soon as possible by tickling the back of the throat with the finger or other blunt object. Get medical attention immediately.

Allergic reactions: Contact a physician immediately.

### Container

React-Rite™ TMTD is shipped in 100 pound (net), fibre drums and 50 pound (net) paper bags.

Our technical service representatives are available to assist in solving your specific problem. Our phone number is (404) 235-8294.

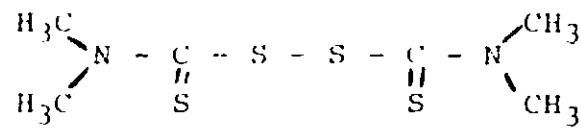
Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of Reactor Products, Inc., no guarantee, expressed or implied, is made as to the effects of such use or the results to be obtained if not used in accordance with directions or established state practice. The buyer assumes all risks including injury or damage resulting from misuse of the product either alone or in combination with other materials.

# Product Bulletin

## Typical Properties

Chemical . . . . . Tetramethylthiuram disulfide  
Active content, % . . . . . 99.5

Structural Formula



Empirical Formula . . . . .  $[(\text{CH}_3)_2\text{NCH}]_2\text{S}_2$   
Molecular Weight . . . . . 240.2  
Melting Range, °C . . . . . 240 - 290  
Boiling Point, °C . . . . . N/A  
Physical State . . . . . Micromilled powder  
Color . . . . . Cream to White  
Odor . . . . . Characteristic  
Stability . . . . . Thermally stable under normal storage conditions.  
Bulking Factor, lb/ft<sup>3</sup> . . . . . 22

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