

MATERIAL SAFETY DATA SHEET

SPOTRETEF™

PRODUCT IDENTIFICATION

Product Name: Spotrete F
Cleary Product Code: 4322
E.P.A. REG. NO.: 45728-26-1001
Chemical Name: Tetramethylthiuram disulfide
Synonyms: Thiram

INGREDIENTS

Ingredients (CAS#)	Percent
Tetramethylthiuram disulfide (137-26-8)42%
Inert Ingredients58%

Exposure Limits
0.5 mg/m³ TWA-PEL

PHYSICAL DATA

Boiling Point: Approx. 220 F
Melting Point: N/A
Freezing Point: Approx. 32 F
Specific Gravity: 1. 15
Vapor Pressure @ 20 C mm Hg): Negligible
% Volatile: Approx. 47%
Evaporation Rate: N/A
Solubility in Water: 30 mg/L at room temp.
Appearance and Odor: Opaque liquid suspension. No specific odor.

FIRE & EXPLOSION DATA

Flash Point (Method): N/A
Flammable Limits (vol % in air): N/A
Autoignition Temperature: N/A
Extinguishing Media: Carbon dioxide, dry chemical, foam, water or water fog. Not defined as flammable or combustible.
Special Firefighting Procedures: Evacuate area of all non-emergency personnel. Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Fight fire from upwind and cool exposed intact containers and structures with water spray or stream at maximum range. Decontaminate all protective equipment after use, prevent skin contact. This product is toxic to fish. Contain all water run-off with diking.
Unusual Fire and Explosion Hazards: Decomposition products are toxic.

REACTIVITY HAZARD DATA

Stability: Stable
Conditions to Avoid: Excessive heat
Incompatibility: Acids, oxidizers, copper
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Decomposed by excessive heat and acids. Heating to decomposition generates carbon disulfide and oxides of carbon, nitrogen and sulfur. Acid decomposition may evolve carbon disulfide and hydrogen sulfide.

HEALTH HAZARD DATA

Inhalation: Mist or vapor may cause mucous membrane and respiratory irritation with coughing, choking, labored breathing and lethargy.
Eye Contact: May cause irritation based on a study in rabbits.
Skin Contact: May cause irritation and possible sensitization. May be absorbed through the skin based on animal studies.
Ingestion: May cause systemic poisoning with symptoms of weakness, nausea, diarrhea, confusion, dizziness, delirium, tremor, hallucinations, ataxia, ascending paralysis, hypothermia and peripheral neuropathy (pain, numbness and weakness of extremities). Respiratory paralysis and death may occur.
Chronic Effects of Overexposure: Thiram has been found to be mutagenic in some test systems and to cause adverse reproductive effects in laboratory animals.
Other Toxic Effects: An antabuse-like reaction with flushing, sweating, headache, weakness and hypertension may occur when ethyl alcohol (alcoholic beverages) is ingested following exposure to this material.
TOXICITY DATA:
ORAL (acute): LD₅₀ 2400 mg/kg (rat)
DERMAL (acute): LD₅₀ 5000 mg/kg (rat)
INHALATION (acute): LD₅₀ 4.42 mg/L 4 Hr (rat)
CHRONIC, SUBCHRONIC: This product is not listed as a carcinogen or suspect carcinogen by NTP, IARC, OSHA. This material may cause skin sensitization. Thiram is mutagenic in some test systems and has been found to cause adverse reproductive effects and teratogenic effects in laboratory animals.



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DAYTON, NJ 08810-1501

EMERGENCY PHONE NUMBERS:
M-F 9AM-5PM ET
800-524-1662 • 732-329-8399
24 Hour CHEMTREC
800-424-9300

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EMERGENCY AND FIRST AID PROCEDURES

Ingestion: If conscious, give 1-2 glasses of water to dilute and induce vomiting. Get immediate medical attention.

Skin Contact: Wash contact area thoroughly with soap and water until no traces of the chemical remain. Remove contaminated clothing, immediately and launder before reuse. Seek medical attention if irritation develops.

Eye Contact: Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Get immediate medical attention.

Inhalation: Remove to fresh air. If breathing is difficult or has stopped seek medical attention immediately, start necessary resuscitation procedures.

SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear protective clothing, including resistant boots and socks. Chemical resistant gloves are required for all operations where contact with Spotrete is possible.

Eye Protection: Non-venting chemical safety goggles or face shield are required if full face-piece respirator is not worn. Do not wear contact lenses during use of product.

Ventilation: Use in a well ventilated area.

Respiratory Protection: Use approved OSHA and/or NIOSH full-face respirator in confined spaces where ventilation is limited. A half-face device is acceptable provided eye protection measures indicated above are followed.

SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear appropriate protective clothing to prevent eye and skin contact and appropriate respirator to prevent overexposure. Contain and absorb with inert material, carefully sweep up spilled material and collect into closeable container for proper disposal. This material is toxic to fish. Prevent runoff to storm sewers and ditches leading to natural waterways.

Waste Disposal Methods: Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by intended use according to label instructions, contact the appropriate agency in your state or the nearest EPA Regional office for guidance.

SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing: Store in a well ventilated area with original containers closed. Do not store in a manner where cross-contamination with other pesticides, food or feed could occur.

ADDITIONAL REGULATORY INFORMATION

DOT Shipping Name: Environmentally hazardous substance, Liquid, NOS, (Thiram)

DOT Hazard Classification: Class 9 (miscellaneous hazard)

DOT Label Requirements: Class 9

UN Identification Number: UN 3082

Hazardous Substance: Thiram

Reportable Quantity: 10 lbs. active material (13.3 lbs. product)

OSHA Hazard Classification: Irritant, toxic, target organ effect, sensitizer

EPA SARA Title III Data:

ACUTE: Yes

CHRONIC: Yes

FIRE: No

REACTIVE: No

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