



MATERIAL SAFETY DATA SHEET

THIRAM 75WP

Version: 1.6
Date of Issue: 10/09/2009
Date printed: 10/09/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : THIRAM 75WP

Chemical name: Thioperoxydicarbonic diamide, tetramethylthiram

Use of substance/preparation: Fungicide

Supplier: Chemtura Canada Co./Cie
25 ERB STREET
Elmira, Ontario N3B 3A3 Canada

Manufacturer: Chemtura Corporation
199 Benson Road
Middlebury, CT 06749 USA

Emergency telephone number: 866-744-3060 (Canada 24 hours)
CANUTEC (24 hours) 613-996-6666 (call collect)

Environmental, Health and Safety Department: 866-430-2775

Customer Care: +44 161 875 3800

Prepared by Product Safety Department Date of Issue: 10/09/2009
(US) +1 866-430-2775
(EU) +44 (0) 1753.603.000
Email: MSDSRequest@chemtura.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING!

MAY BE IRRITATING TO RESPIRATORY SYSTEM, SKIN AND EYES.

MAY CAUSE SKIN SENSITIZATION.

MAY BE HARMFUL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN.

EXPOSURE CAN RESULT IN AN ADVERSE REACTION WITH THE CONSUMPTION OF ALCOHOLIC BEVERAGES.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	% BY WEIGHT
Tetramethylthiuram disulfide CAS# 137-26-8	75
Free Silica (Quartz) CAS# 14808-60-7	<= 0.11

(M)SDS# 000000034329



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WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

CPR Compliance

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

4. FIRST AID MEASURES

Swallowing

If patient is fully conscious, give two glasses of water. Do not induce vomiting unless told to do so by the poison control center or doctor. Obtain medical attention immediately. Do not give milk, oily products, fat or alcohol. Do not give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air. Give artificial respiration if not breathing. Obtain medical attention.

Skin contact

Wash skin with soap and water. Remove contaminated clothing. Wash clothing before re-use. Obtain medical attention if irritation persists.

Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Flash point: 89 °C

Hazardous combustion products

Irritating fumes.
Oxides of carbon.
Oxides of nitrogen.

Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes.

Special protective equipment for firefighters

Body covering protective clothing, full "turn-out" gear.
Self-contained breathing apparatus.

Extinguishing media

Suitable: Large fires:
- alcohol-type foam or universal-type foams
Small fires:
- CO2
- dry chemical
- water spray

Unsuitable: - water jets

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment., Avoid contact with eyes and skin.

Environmental precautions

Prevent from entering sewer system, surface water or soil.

(M)SDS# 00000034329



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Methods for cleaning up

Sweep up and collect in a suitable container for disposal.
Avoid dust formation.
Observe government regulations.

7. HANDLING AND STORAGE

HANDLING

Handling precautions

Do not get in eyes, on skin, on clothing., Do not swallow., Avoid dispersion of dust to reduce fire and explosion potential., Do not eat, drink or smoke when handling.

Other precautions

NOTE TO END-USERS: The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.

STORAGE

Storage requirements

Store in a cool, dry place., Keep container closed., Store in original containers away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Consult local authorities for acceptable provincial values.

<u>Component</u>	<u>Country</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Tetramethylthiuram disulfide	USA	TLV-TWA	1 ml/m ³	
	Alberta, Canada		1 mg/m ³	
	Quebec, Canada		5 mg/m ³	
Free Silica (Quartz)		ACGIH - respirable dust	0.05 mg/m ³	Toxicity to reproduction/fertility: CANCER HAZARD A2
		OSHA - respirable dust	0.1 mg/m ³	TWA
		OSHA - total dust	0.3 mg/m ³	TWA

PERSONAL PROTECTION

Respiratory protection

In the absence of engineering controls sufficient to maintain airborne concentrations below recommended occupational exposure limit values, appropriate respiratory protection should be utilized., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation., Use an approved full-face air-purifying respirator. For emergency and other conditions where the exposure limit may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

Hand protection / protective gloves

Chemical resistant protective gloves

Eye protection

Wear suitable eye protection., Safety glasses with side shields., Face shield or chemical splash goggles in case of splashing.

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

ENGINEERING CONTROLS

Ventilation

Apply local exhaust ventilation at points of dust generation.

(M)SDS# 00000034329

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9. PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE**

Physical state Solid
Color Pink
Odor Characteristic

OTHER PROPERTIES

Boiling point Not available
Melting point Not available
Specific gravity (H₂O=1) Not available
Flash point 89 °C
Method: Cleveland open cup ASTM D 92
Autoignition temperature Not available

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal storage and handling conditions.

Incompatible materials:

Oxidizing agents.
Strong acids.
Strong bases.

Hazardous combustion products:

Irritating fumes.
Oxides of carbon.
Oxides of nitrogen.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Component data Tetramethylthiuram disulfide Acute toxicity - Swallowing:	LD50 - Rat Result: 2.4 g/kg
Component data Tetramethylthiuram disulfide Acute toxicity - Skin absorption:	LD50 - Rabbit Result: > 2.0 g/kg
Component data Tetramethylthiuram disulfide Acute toxicity - Inhalation:	LC50 - Rat Result: 4.42 mg/l Exposure time: 4 h
Component data Tetramethylthiuram disulfide Skin irritation - Skin contact:	Species: Rabbit Result: Slight

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<u>Component data</u> Tetramethylthiuram disulfide Eye irritation - Eye contact:	Species: Rabbit Result: Moderate irritation
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<u>Component data</u> Tetramethylthiuram disulfide Sensitization:	Species: Guinea pigs Result: Positive
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CARCINOGENICITY
Component (Free Silica (Quartz)): IARC Overall Evaluation is 2A (probably carcinogenic to humans)

12. ECOLOGICAL INFORMATION

<u>Component ecotoxicology</u> Tetramethylthiuram disulfide <u>Acute toxicity fish:</u>	LC50 - Rainbow trout (Oncorhynchus mykiss) Result: 0.128 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> Tetramethylthiuram disulfide <u>Acute toxicity fish:</u>	LC50 - Bluegill (Lepomis macrochirus) Result: 0.0445 mg/l Exposure time: 96 h
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<u>Component ecotoxicology</u> Tetramethylthiuram disulfide <u>Acute toxicity to aquatic invertebrates:</u>	LC50 - Water flea (Daphnia magna) Result: 0.21 ppm Exposure time: 48 h
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13. DISPOSAL CONSIDERATIONS

General: Do not discharge to sewers and natural waters., Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.Do not discharge to sewers and natural waters., Incinerate in a furnace where permitted under appropriate federal, provincial, and local regulations.

14. TRANSPORT INFORMATION

TDG - Canada
Not regulated by ground or rail.

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thiram)
Class: 9
UN ID #: UN 3077
Packing group: III
Technical description Thiram

IMDG Classification

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
Class: 9
Subsidiary risk: marine pollutant
UN ID #: UN 3077
Packing group: III
Technical description (Thiram)



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ICAO/IATA Classification

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class: 9
UN ID #: UN 3077
Packing group: III

Technical description (Thiram)

Only regulated by air Into, Out of or Within the United States in containers 13 lbs (5.9 kg) or greater.

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION

This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

CPR Compliance

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

CHEMICAL INVENTORY

Canada: All substances in this product are exempt from the DSL as this product is registered under the Pest Control Products Act., PCP# 27556
United States: This product is on the TSCA inventory.

16. OTHER INFORMATION

STP	Standard temperature and pressure
W/W	Weight/Weight

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THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.

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