

# Dimacit TMTD-OP

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Taminco, A Subsidiary of Eastman Chemical Company Pantserschipstraat 207. 9000 Gent, Belgium Phone: 32-9-254-14-11 Fax: 32-9-254-14-10	Emergency Contact Chemtrec: 1-800-424-9300 (USA) (1)330-542-8400 (outside USA)
Trade Name(s): Dimacit TMTD Oiled Powder	Chemical Name: Tetramethylthiuram disulfide
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Initial product for chemical reactions.
Issued By: Sovereign Chemical Company  According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: May 1, 2023

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Information in accordance with US 29 CFR 1910.1200 (Hazcom 2012) and Regulation (EC) No 1272/2008

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity – repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

Labeling (Regulation EC No 1272/2008)  
 Hazard pictograms



Signal Word: Warning

Hazard Statements

- H302 Harmful if swallowed.
- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Disposal

- P501 Dispose of contents/container to an approved incineration plant.

Hazardous ingredients which must be listed on the label: Thiram

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance

Chemical Name	CAS No	EC No	Weight %	Classification
tetramethylthiuram disulphide	137-26-8	205-286-2	≥96%	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410; M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10

The remaining unspecified ingredients are impurities and are not hazardous.

**4. FIRST AID MEASURES**

Description of first aid measures

General information	Show tis safety data sheet to the doctor in attendance. Consult a physician.
If inhaled	Supply fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical advice/attention.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing immediately. Call a physician or poison control center immediately.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If swallowed	Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms	<ul style="list-style-type: none"> <li>Irregular cardiac activity</li> <li>Dermatitis</li> <li>Eczema</li> <li>Headache</li> <li>Nausea</li> <li>Shortness of breath</li> <li>May produce an allergic reaction</li> <li>Health injuries may be delayed</li> <li>More severe effects if alcohol is consumed</li> </ul>
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Indication of any immediate medical attention and special treatment needed

Treatment	<ul style="list-style-type: none"> <li>General advice for dithiocarbamates</li> <li>Biomonitoring possible at chronic exposure: determination of TTCA in the urine at the end of the workday/week.</li> <li>Blood-testing for delayed effects: liver tests, kidney function, thyroid function</li> </ul>
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**5. FIRE FIGHTING MEASURES**

Extinguishing media

Suitable extinguishing Agents	<ul style="list-style-type: none"> <li>Use water spray to extinguish.</li> <li>Carbon dioxide (CO2).</li> </ul>
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Alcohol-resistant foam.

Unsuitable extinguishing media Do NOT use water jet.

Special hazards arising from the substance or mixture

Specific hazards during firefighting Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous combustion products Carbon monoxide  
Nitrogen oxides (NOx)  
Sulphur oxides

Advice for firefighters

Special protective equipment for Wear an approved positive pressure self-contained breathing apparatus in addition to standard firefighting gear.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions Wear appropriate personal protective equipment. Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions Avoid release to the environment.

Methods for cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**7. HANDLING AND STORAGE**

Advice on safe handling Avoid breathing dust. Do not get on skin or clothing. Do not get in eyes. Do not swallow. Ensure adequate ventilation. Wash thoroughly after handling.

Advice on protection against fire and explosion Minimize dust generation and accumulation. Keep product and empty container away from heat and sources of ignition.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Conditions for storage Keep tightly closed. Keep in a dry, cool, and well-ventilated place. Keep away from direct

safe storage areas and containers      direct sunlight. Use only explosion-proof equipment.

**8. EXPOSURE CONTROLS - PERSONAL PROTECTION**

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Routes of exposure	Potential health effects	Value
	Workers	Dermal	Acute effects	10 mg/kg bw/day
	Workers	Inhalation	Acute effects	0,564 mg/m3
	Workers	Dermal	Long-term systemic effects	1,6 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	0,118 mg/m3

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

Substance name	Environmental Compartment	Value
	Fresh water	0,00046 mg/l
	Fresh water sediment	0,047 mg/kg
	Marine water	0,000046 mg/l
	Marine sediment	0,0047 mg/kg
	Soil	0,00912 mg/kg
	Sewage treatment plant	0,0311 mg/l

**Engineering measures**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal protective equipment**

**Eye protection**      Wear safety glasses with side shields (or goggles). Face-shield Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

**Hand protection**      Rubber gloves Neoprene gloves The data about break through time/strength of material are standard values! The exact breakthrough time/strength of material must be obtained from the producer of the protective glove.

**Skin and body protection**      Complete suit protecting against chemicals.

**Respiratory Protection**      Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Effective dust mask.

Protective measures      Remove respiratory and skin/eye protection only after vapors have been cleared from the area. Ensure that eye flushing systems and safety showers are located close to the working place. Use personal protective equipment as required.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

General Information

Appearance Form: Powder. Color: Cream-white.	Change in Condition Melting Point/Melting Range: 144-146 °C Boiling Point/Boiling Range: 165 °C (Decomposition)
Odor: None.	Octanol/Water Partition Coefficient: log Pow: 1.73
Odor threshold: Not determined.	pH Value: 6.5 Concentration: 4%
Vapor pressure: .00002 Pa (25 °C)	Flash point: Not applicable.
Density at 20 °C: Not determined.	Flammability (solid, gaseous): Product is not flammable.
Density: 1.36 g/cm <sup>3</sup> (20 °C)	Ignition temperature: Not determined.
Vapor density: Not applicable.	Decomposition temperature: 165 °C
Evaporation rate: Not applicable.	Self-igniting: Not determined.
Solubility in / Miscibility with water: .0165 g/l	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable. Kinematic: Not applicable.	Explosion limits Lower: Not determined. Upper: Not determined.

**10. STABILITY AND REACTIVITY**

Reactivity      None reasonably foreseeable.

Chemical stability      Stable under normal conditions.

Possibility of hazardous reactions      Hazardous decomposition products formed under fire conditions. Dust can form an explosive mixture in air.

Conditions to avoid      Avoid dust formation. Heat, flame, and sparks.

Incompatible materials      Strong oxidizing agents  
Strong acids

Hazardous decomposition products      Sulfur oxides (SO<sub>x</sub>)  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide and carbon dioxide

**11. TOXICOLOGICAL INFORMATION**

## Acute toxicity

## tetramethylthiuram disulphide

Acute oral toxicity LD50 Oral (Rat): 1.800 mg/kg

Acute inhalation toxicity LC50 (Rat): 4,42 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Acute dermal toxicity LD50 Dermal (Rabbit): &gt; 2.000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

## Skin corrosion/irritation

## tetramethylthiuram disulphide

Species : Rabbit  
Exposure time : 4 h  
Result : Skin irritation

## Serious eye damage/eye irritation

## tetramethylthiuram disulphide

Species : Rabbit  
Result : irritating

## Respiratory or skin sensitization

## tetramethylthiuram disulphide

Test Type : Skin sensitization  
Species : Guinea pig  
Result : sensitizing

## Germ cell mutagenicity

## Product: Germ cell mutagenicity - Assessment

Did not show mutagenic effects in animal experiments.

## Carcinogenicity

Remarks: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity

Reproductive toxicity – Assessment: Did not show teratogenic effects in animal experiments.

STOT-single exposure

Remarks: No data available

STOT-repeated exposure

Routes of exposure : Ingestion  
Target Organs : Thyroid, Kidney, Liver

Aspiration toxicity

Product: No data available

Information on likely routes of exposure

Inhalation	Remarks: Harmful if inhaled.
Skin contact	Remarks: Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Remarks: Causes serious eye irritation.
Ingestion	Remarks: Harmful if swallowed.

**12. ECOLOGICAL INFORMATION**

tetramethylthiuram disulphide

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,046 - 0,54 mg/l Exposure time: 96 h
Toxicity to Daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 0,011 - 0,139 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	EC50 (Chlorella pyrenoidosa (aglae)): > 0,14 mg/l Exposure time: 120 h
M-Factor (Acute/chronic aquatic toxicity)	10
Toxicity to microorganisms	IC50 (Bacteria): 3,11 mg/l Exposure time: 3 h
Toxicity to fish (Chronic toxicity)	NOEC: 0,0046 mg/l Exposure time: 33 d Species: Pimephales promelas (fathead minnow)



Not readily biodegradable.

Bioaccumulation is unlikely.

Distribution among environmental compartments: Koc: 2245 - 24526

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 13. DISPOSAL CONSIDERATIONS

Waste treatment	Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.
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### 14. TRANSPORTATION INFORMATION

UN-Number

ADN, ADR, IMDG, IATA, DOT	UN3077
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UN proper shipping name:

ADN, ADR, IMDG, IATA, DOT	Environmentally hazardous substances, solid, n.o.s. (thiram)
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Transport hazard class(es)

ADN, ADR, IMDG, IATA, DOT	Class 9
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Packing group

ADN  
 Packing group: III  
 Classification Code: M7  
 Hazard Identification Number: 90  
 Labels: 9

ADR  
 Packing group: III  
 Classification Code: M7  
 Hazard Identification Number: 90  
 Labels: 9  
 Tunnel restriction code: (-)

IMDG  
 Packing group: III  
 Classification Code: M7  
 EMS Code: F-A, S-F

IATA

Packing instruction (cargo/passenger aircraft): 956  
Packing instruction (LQ): Y956  
Packing group: III  
Labels: Class 9 – Miscellaneous dangerous substances and articles

Environmental hazards

ADN Environmentally hazardous : yes

ADR Environmentally hazardous : yes

IMDG Marine pollutant : yes

Special precautions for user

Shipping in package sizes of less than 5 L (liquids) or 5 KG (solids) may lead to a non-regulated classification.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

**15. REGULATORY INFORMATION**

Safety, health, and environmental regulations/legislation specific for the substance or mixture  
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

**Other regulations**

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The ingredients of this product are reported in the following inventories:

TCSI: On the inventory, or in compliance with the inventory

TSCA: All substances listed as active on the TSCA inventory

AICS: On the inventory, or in compliance with the inventory

DSL: All components of this product are on the Canadian DSL

ENCS: On the inventory, or in compliance with the inventory

ISHL: On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

PICCS: On the inventory, or in compliance with the inventory

IECSC: On the inventory, or in compliance with the inventory

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**16. OTHER INFORMATION**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.