

Safety Data Sheet

According to Regulation (EC) No 1907/2006

TMTD

Version 1.3

Issue date: 15/01/2022

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SDS Record Number: CSSS-TCO-010-120957

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: TMTD
Additional identification: Thiram
Identification of the product: CAS#137-26-8; EC#205-286-2
Index Number: 006-005-00-4
REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Used as rubber acelerator.

1.2.2 Uses advised against:

Not available

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer): Shandong Sunsine chemical co., ltd.
Address: ECONOMY TECHNICAL DEVELOPMENT AREA, SHANXIAN CITY,
SHANDONG PROVINCE, CHINA
Contact person(E-mail): sale@sunsine.com
Telephone: +86 530 4686360
Fax: +86-530-4684121

1.4 Emergency telephone Number:

+353 41 980 6916

Available outside office hours? YES NO

Section 2 Hazards Identification

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Acute Tox. 4	H302
Skin Irrit. 2	H315
Skin Sens. 1	H317
Eye Irrit. 2	H319
Acute Tox. 4	H332
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H373: May cause damage to organs through prolonged or repeated exposure.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:

P260: Do not breathe dust/fume/ gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302 + P352: IF ON SKIN: Wash with plenty of water.

P304 + P340: IF INHALED: Remove person to fresh air and keep 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.

P312: Call a POISON CENTER/ doctor if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P330: Rinse mouth.

P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Dispose of contents/container in accordance with local/ regional/national/international regulation.

2.3 Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Thiram	N/A	137-26-8	205-286-2	≥97.5%
Sodium dimethyldithiocarbamate	N/A	128-04-1	204-876-7	≤1.0%
Di-methylamine	N/A	124-40-3	204-697-4	≤0.5%
Water	N/A	7732-18-5	231-791-2	≤0.5%
tetramethylthiuram monosulfide	N/A	97-74-5	202-605-7	≤0.5%

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

4.1.2 In case of skin contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

4.1.3 In case of eyes contact:

Remove contact lenses. Hold eyelids apart. Flush immediately with water for at least 15 minutes. Seek medical attention.

4.1.4 In case of ingestion:

Rinse mouth. Give water to drink. Induce vomiting. Never induce vomiting in unconscious or confused persons. Always seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled.

May cause damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Carbon dioxide, appropriate foam or dry chemical, water spray, water mist.

Unsuitable extinguishing media: Water jet.

5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions: Carbon monoxide (CO), nitrous gases (NO_x).

5.3 Advice for firefighters:

Firefighters must wear fire resistant protective equipment. Wear self contained breathing apparatus and protective gloves.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Remove ignition sources. Provide adequate ventilation. Avoid inhalation of vapor or dust. Avoid skin and eye contact. Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions:	Avoid disposing into drainage/sewer system or directly into the aquatic environment. Keeping away from drains, surface and ground-water and soil

- 6.3 Methods for Containment and Cleaning up:** Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Clean up affected area.
- 6.4 Reference to other sections:** See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Do not breathe dusts/vapor. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Take precautionary measures against static discharges.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in original packaging, tightly closed. Advice on storage assembly. Do not store together with foodstuffs. Do not store together with: Acids and Bases.

Keep container tightly closed and dry in a cool, well-ventilated place.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
			ppm	mg/ m ³	ppm	mg/ m ³	Notes
Thiram (ISO)	205-286-2	137-26-8	-	5	-	10	-

8.1.2 Additional exposure limits under the conditions of use:

Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 0.118mg/m³

Workers - Hazard via inhalation route-Systemic effects- Acute/short term exposure-DNEL (Derived No Effect Level): 0.564mg/m³

Workers - Hazard via dermal route- Systemic effects- Long term exposure- DNEL (Derived No Effect Level): 1.6 mg/kg bw/day

Workers - Hazard via dermal route- Systemic effects- Acute/short term exposure-DNEL (Derived No Effect Level): 10 mg/kg bw/day

Hazard for aquatic organisms- PNEC aqua (freshwater): 0 mg/L

Hazard for aquatic organisms- PNEC aqua (marine water): 0 mg/L

Hazard for aquatic organisms- PNEC aqua (intermittent releases): 0 mg/L

Hazard for aquatic organisms- PNEC STP: 0.031 mg/L

Hazard for aquatic organisms- PNEC sediment (freshwater): 0.047mg/kg sediment dw

Hazard for aquatic organisms- PNEC sediment (marine water): 0.005 mg/kg sediment dw

Hazard for terrestrial organisms- PNEC soil: 0.009 mg/kg soil dw

Hazard for predators-Secondary poisoning-PNEC oral: 0.59 mg/kg food

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection:

Wear appropriate goggles to prevent eye exposure.

Hand protection:

Wear appropriate gloves to prevent skin exposure.

Body protection:

Wear suitable protective clothing to prevent skin exposure.

Respiratory protection:

Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory

Thermal hazards:	equipment. Wear suitable protective clothing to prevent heat.
8.2.3 Environmental exposure controls:	Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	White or light grayish powder or granule
Colour:	White, light cream
Odour:	Slightly amine like
Odour threshold:	Not available
pH:	6.75(20 °C, 4 vol%)
Melting point/range (°C):	144 - 146 °C
Boiling point/range (°C):	Not available
Flash point (°C):	Approx. 150 °C (cleveland, open cup)
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	No
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Lower Explosion Limit(LEL): 10g/m3. Minimum ignition energy: =<10mj. Limiting oxygene concentration(LOC) (V>=1m3):7.4Vol%O2.
Vapour pressure (25°C):	0 Pa
Vapour density:	Not available
Density:	1.36 g/cm ³ (20 °C)
Bulk density (kg/m³):	410-450 kg/m ³
Water solubility (g/l):	0.018 g/L(20 °C)
n-Octanol/Water (log Po/w):	log Pow= 1.8
Ignition temperature:	>400 °C
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Non explosive
Oxidising properties:	Not available
Molecular Formula:	C ₆ H ₁₂ N ₂ S ₄
Molecular Weight:	240.43

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Methanol: 1.84 g/L(20 °C) Petroleum ether 40-60: 0.04 g/L(20 °C)
Surface tension:	70 mN/m(21.5 °C)
Dissociation constant in water(pKa):	8.19(25°C)
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
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10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials.
10.5 Incompatible materials:	Strong oxidizing agents, strong acid.
10.6 Hazardous decomposition products:	During the vulcanization process, traces of carcinogenic N-nitrosamines may be formed from decomposition products (amines) in the presence of nitrosating agents.

Section 11 Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:	
LD50(Oral, Rat):	1080 mg/kg
LD50(Dermal, Rabbit):	> 2 000 mg/kg bw
LC50(Inhalation, Rat):	4.42 mg/L air (analytical) 4h
Skin corrosion/Irritation:	Causes skin irritation.
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard:	Not classified

Section 12 Ecological information

12.1 Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	0.046 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	0.38 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	0.065 mg/L	72h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability:	TMTD technical is classified as not ready biodegradable using the closed bottle test.
12.3 Bioaccumulative potential:	Not available
12.4 Mobility in soil:	log Koc=3.3
12.5 Results of PBT&vPvB assessment:	The substance is not PBT / vPvB.
12.6 Other adverse effects:	Very toxic to aquatic life with long lasting effects.

Section 13 Disposal considerations

13.1 Waste treatment methods:	The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.
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Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	3077	3077	3077
UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES,	ENVIRONMENTALLY HAZARDOUS SUBSTANCES,	ENVIRONMENTALLY HAZARDOUS

	SOLID, N.O.S. (Thiram)	SOLID, N.O.S. (Thiram)	SUBSTANCES, SOLID, N.O.S. (Thiram)
Transport hazard Class	9	9	9
Packaging group	III	III	III
Environmental hazards	Yes	Yes	Yes
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of Marpol and the IBC Code	IBC08	IBC08	IBC08

Section 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment has been carried out? YES NO

Section 16 Other information

16.1 Indication of changes:

Version 1.3 Amended by (EU) 2015/830

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Author: Hangzhou CIRS Co., Limited **Website:** www.cirs-group.com **Tel:** 0571-87206555 **Email:** info@cirs-group.com