






CAS No: 137-26-8
RTECS No: JO1400000
UN No: 3077
EC No: 006-005-00-4

Tetramethylthiuram disulfide
Bis (dimethylthiocarbamoyl) disulfide
TMTD
Tetramethylthioperoxydicarbonic diamide (((H₂N)C(S))₂S₂)
C₆H₁₂N₂S₄ / (CH₃)₂N-CS-S-S-CS-N(CH₃)₂
Molecular mass: 240.4

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
Inhalation	Confusion. Cough. Dizziness. Headache. Sore throat.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	(See Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.
SPILLAGE DISPOSAL		PACKAGING & LABELLING	
Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place. Chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment.		Xn Symbol N Symbol R: 20/22-36/38-43-48/22-50/53 S: (2-)26-36/37-60-61 UN Hazard Class: 9 UN Pack Group: III	
EMERGENCY RESPONSE		SAFE STORAGE	
Transport Emergency Card: TEC (R)-90GM7-III		Separated from acids, strong oxidants, food and feedstuffs. Dry. Keep in a well-ventilated room.	
    			
<p>Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission © IPCS 2004</p> <p style="text-align: center;">SEE IMPORTANT INFORMATION ON THE BACK.</p>			

IMPORTANT DATA

Physical State; Appearance

COLOURLESS CRYSTALS.

Physical dangers

Dust explosion possible if in powder or granular form, mixed with air.

Chemical dangers

The substance decomposes on burning, producing toxic fumes including sulfur oxides, carbon sulfide. Reacts with strong oxidants, acids and oxidizable materials.

Occupational exposure limits

TLV: 1 mg/m³ as TWA; A4; (ACGIH 2004).

MAK: (Inhalable fraction) 5 mg/m³; Sh; Peak limitation category: II(1); Pregnancy risk group: D; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

Inhalation risk

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying or when dispersed, especially if powdered.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract.

Effects of long-term or repeated exposure

Repeated or prolonged contact may cause skin sensitization. The substance may have effects on the thyroid, liver.

PHYSICAL PROPERTIES

Boiling point at 2.6 kPa: (see Notes) 129°C

Melting point: (see Notes) 155-156°C

Density: 1.3 g/cm³

Solubility in water: none

Vapour pressure, Pa at 20°C: negligible

Flash point: 89°C c.c. (see Notes)

Octanol/water partition coefficient as log Pow: 1.82

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Avoid release to the environment in circumstances different to normal use.

NOTES

Physical properties reported in literature are inconsistent.

Carrier solvents used in commercial formulations may change physical and toxicological properties.

Use of alcoholic beverages enhances the harmful effect.

If the substance is formulated with solvent(s) also consult the card(s) (ICSC) of the solvent(s).

Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible