

CAS No: 97-77-8
 RTECS No: JO1225000
 EC No: 006-079-00-8

Tetraethylthiuramdisulfide
 1,1'-Dithiobis(N,N-diethylthioformamide)
 bis-(N,N-Diethylthiocarbamoyl)disulfide
 TETD
 $C_{10}H_{20}N_2S_4 / ((C_2H_5)_2NCS)_2S_2$
 Molecular mass: 269.6

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	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. Prevent build-up of electrostatic charges (e.g., by grounding).	
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
Inhalation		Ventilation, local exhaust, or breathing protection.	
Skin		Protective gloves.	Rinse skin with plenty of water or shower.
Eyes		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Confusion. Headache. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL

Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Do NOT let this chemical enter the environment. Personal protection: P2 filter respirator for harmful particles.

PACKAGING & LABELLING

Xn Symbol
 N Symbol
 R: 22-43-48/22-50/53
 S: (2-)24-37-60-61

EMERGENCY RESPONSE**SAFE STORAGE**

Separated from strong oxidants.

IMPORTANT DATA

Physical State; Appearance

WHITE TO GREY POWDER, WITH CHARACTERISTIC ODOUR.

Physical dangers

Dust explosion possible if in powder or granular form, mixed with air. If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.

Chemical dangers

The substance decomposes on burning producing toxic and corrosive fumes including nitrogen oxides, sulfur oxides. Reacts violently with strong oxidants. Attacks copper.

Occupational exposure limits

TLV: 2 mg/m³ as TWA; A4 (not classifiable as a human carcinogen); (ACGIH 2004).
MAK: (Inhalable fraction) 2 mg/m³; sensitization of skin (Sh);
Peak limitation category: II(8); Pregnancy risk group: D; (DFG 2004).

Routes of exposure

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

Inhalation risk

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

Effects of long-term or repeated exposure

Repeated or prolonged contact may cause skin sensitization. The substance may have effects on the endocrine system, liver, nervous system and thyroid, resulting in impaired functions. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point at 2.3kPa: 117°C
Melting point: 71°C
Density: 1.3 g/cm³

Solubility in water, g/100 ml: 0.02
Octanol/water partition coefficient as log Pow: 3.9

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms.

NOTES

In combination with alcohol the substance causes effects on cardiovascular and central nervous systems resulting in palpitation, hypotension and hyperventilation. The effects may be delayed.

Do NOT take working clothes home.

Antabuse and Rosulfiram are trade names.

Card has been partly updated in April 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

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