

THIOPHENE

1190

October 1997

CAS No: 110-02-1
 RTECS No: XM7350000
 UN No: 2414
 EC No:

Divinylene sulphide
 Thiacyclopentadiene
 Thiofuran
 C_4H_4S / SCH=CHCH=CH
 Molecular mass: 84.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with oxidizing agents.	Foam, powder, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Cough. Dizziness. Sore throat.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety goggles, 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		Do not eat, drink, or smoke during work.	Rinse mouth. Rest.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. (extra personal protection: filter respirator for organic gases and vapours).	Symbol R: S: UN Hazard Class: 3 UN Pack Group: II

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-30G30 NFPA Code: H 2; F 3; R 0;	Fireproof. Separated from oxidizing materials.



IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH PUNGENT ODOUR.

Physical Dangers

The vapour is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.

Chemical Dangers

The substance decomposes on heating and on burning producing toxic and irritating fumes (sulfur oxides). Reacts violently with oxidizing materials, including fuming nitric acid.

Occupational Exposure Limits

TLV not established.

Routes of Exposure

The substance can be absorbed into the body by inhalation of its vapour.

Inhalation Risk

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20°C.

Effects of Short-term Exposure

The substance irritates the eyes and the skin.

PHYSICAL PROPERTIES

Boiling point: 84°C

Melting point: -38°C

Relative density (water = 1): 1.06

Solubility in water: none

Vapour pressure, kPa at 12.5°C: 5.3

Relative vapour density (air = 1): 2.9

Flash point: -1°C

Auto-ignition temperature: 395°C

Explosive limits, vol% in air: 1.5-12.5

Octanol/water partition coefficient as log Pow: 1.81

ENVIRONMENTAL DATA

NOTES

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information