1-DECANETHIOL

0035
April 2004

CAS No: 143-10-2

Decyl mercaptan
$C_{10}H_{21}SH$
Molecular mass: 174.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames, NO sparks, and NO smoking.	Foam, carbon dioxide, powder.
EXPLOSION	Above 98/C explosive vapour/air mixtures may be formed.	Above 98/C use a closed system, ventilation, and explosion-proof electrical equipment.	
EXPOSURE			
Inhalation	Dizziness. Headache. Nausea.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest.
Skin		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Severe deep burns. 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	Nausea. Vomiting. Dizziness. Drowsiness. Headache. Weakness.	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

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. Personal protection: filter respirator for organic gases and vapours.	

EMERGENCY RESPONSE	STORAGE
NFPA Code: H2; F2; R0	Separated from strong oxidants, strong bases.

IPCS
International Programme on Chemical Safety

Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission

IMPORTANT DATA

Physical State; Appearance
COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers
The substance decomposes on burning producing toxic gases including sulfur dioxide (see ICSC 0074). Reacts with strong bases and strong oxidants.

Occupational exposure limits
TLV not established.
MAK not established.

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

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 is corrosive to the eyes. The substance may cause effects on the central nervous system.

PHYSICAL PROPERTIES

Boiling point: 241/C
Melting point: -26/C
Relative density (water = 1): 0.84
Solubility in water: none

Vapour pressure, Pa at 20/C: <10
Relative vapour density (air = 1): 6.0
Relative density of the vapour/air-mixture at 20/C (air = 1): 1.00
Flash point: 98/C

ENVIRONMENTAL DATA

NOTES

ADDITIONAL INFORMATION