

# 1,3-PROPANE SULTONE

1524  
April 2004

CAS No: 1120-71-4  
RTECS No: RP5425000  
UN No: 2811  
EC No: 016-032-00-3

1,2-Oxathiolane-2,2-dioxide  
3-Hydroxy-1-propanesulphonic acid sultone  
1-Propanesulfonic acid, 3-hydroxy-gamma-sultone  
C<sub>3</sub>H<sub>6</sub>O<sub>3</sub>S  
Molecular mass: 122.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
<b>EXPLOSION</b>			

EXPOSURE		AVOID ALL CONTACT!	
<b>Inhalation</b>	Cough.	Closed system.	Fresh air, rest.
<b>Skin</b>	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
<b>Eyes</b>	Redness.	Face shield, 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.
<b>Ingestion</b>	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Chemical protection suit including self-contained breathing apparatus. Vacuum spilled material OR sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	T Symbol R: 45-21/22 S: 53-45 Note: E UN Hazard Class: 6.1 UN Pack Group: III  Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61GT2-III	Separated from food and feedstuffs. Store in an area without drain or sewer access.

### IMPORTANT DATA

**Physical State; Appearance**

WHITE CRYSTALS OR COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

**Chemical dangers**

The substance decomposes on heating producing toxic fumes including sulfur oxides. Reacts with moist air to produce toxic 3-propane sulfonic acid.

**Occupational exposure limits**

TLV: L as TWA; A3; (ACGIH 2004). See Notes.  
MAK: H; Carcinogen category: 2; (DFG 2003).

**Routes of exposure**

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

**Inhalation risk**

A harmful concentration of airborne particles can be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is mildly irritating to the eyes and the skin.

**Effects of long-term or repeated exposure**

This substance is possibly carcinogenic to humans.

### PHYSICAL PROPERTIES

Decomposes below boiling point  
Melting point: 31/C

Relative density (water = 1): 1.393 (at 40/C)  
Solubility in water, g/100 ml: 10

### ENVIRONMENTAL DATA

### NOTES

Depending on the degree of exposure, periodic medical examination is suggested.  
Do NOT take working clothes home.  
TLV: Exposure by all routes should be carefully controlled to level as low as possible.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

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