

FURAN**1257**

March 1995

CAS No: 110-00-9
 RTECS No: LT8524000
 UN No: 2389
 EC No:

Furfuran
 Divinylene oxide
 Oxacyclopentadiene
 C₄H₄O
 Molecular mass: 68.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Extremely flammable.	NO open flames, NO sparks, and NO smoking.	Powder, alcohol-resistant foam, water spray, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Cough. Sore throat.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration if indicated. Refer for medical attention.
Skin	Redness.		Remove contaminated clothes. 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		Do not eat, drink, or smoke during work.	

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Ventilation. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer (extra personal protection: self-contained breathing apparatus).	Symbol R: S: UN Hazard Class: 3 UN Pack Group: I

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-30G30 NFPA Code: H1; F4; R1;	Fireproof. Separated from strong oxidants, acids. Cool. Well closed. Store only if stabilized.

IMPORTANT DATA

Physical State; Appearance

CLEAR COLOURLESS LIQUID, TURNING BROWN UPON STANDING, WITH CHARACTERISTIC ODOUR.

Physical Dangers

The vapour is heavier than air and may travel along the ground; distant ignition possible.

Chemical Dangers

The substance can form explosive peroxides upon contact with air. Reacts violently with oxidants and acids causing fire and explosion hazard. Fire hazard upon exposure to heat or flame.

Occupational Exposure Limits

TLV not established.

Routes of Exposure

The substance can be absorbed into the body by inhalation of its vapour and by inhalation of its aerosol, and through the skin.

Inhalation Risk

A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

Effects of Short-term Exposure

The vapour irritates the respiratory tract. Inhalation of the vapour may cause lung oedema (see Notes).

PHYSICAL PROPERTIES

Boiling point: 31.3°C
Melting point: -85.6°C
Relative density (water = 1): 0.94
Solubility in water: poor

Relative vapour density (air = 1): 2.3
Flash point: -35°C
Explosive limits, vol% in air: 2.3-14.3
Octanol/water partition coefficient as log Pow: 1.34

ENVIRONMENTAL DATA

NOTES

The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Immediate administration of an appropriate spray, by a doctor or a person authorized by him/her, should be considered. An added stabilizer or inhibitor can influence the toxicological properties of this substance, consult an expert. Check for peroxides prior to distillation; eliminate if found.

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