

ISOPROPYL GLYCIDYL ETHER**0171**

November 1998

CAS No: 4016-14-2
RTECS No: TZ3500000
UN No: 19931,2-Epoxy-3-isopropoxypropane
IGE
(Isopropoxymethyl)oxirane
 $C_6H_{12}O_2$
Molecular mass: 116.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Above 33/C explosive vapour/air mixtures may be formed.	Above 33/C use a closed system, ventilation, and explosion-proof electrical equipment.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Burning sensation. Cough. Dizziness. Headache. Laboured breathing. Shortness of breath. Sore throat. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Refer for medical attention.
Skin	Redness. Pain.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety spectacles 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. Give plenty of water to drink.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible. Carefully collect remainder, then remove to safe place. Personal protection: filter respirator for organic gases and vapours.	UN Hazard Class: 3 UN Pack Group: III

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30GF1-III	Fireproof. Separated from strong oxidants, acids. Cool. Dry. Keep in the dark. Well closed.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID

Chemical dangers

The substance can presumably form explosive peroxides upon exposure to air or light. Reacts violently with strong oxidants amines and acids.

Occupational exposure limits

TLV: 50 ppm as TWA, 75 ppm as STEL; (ACGIH 2004).
MAK: Carcinogen category: 3B; (DFG 2004).

Routes of exposure

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

Inhalation risk

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

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. Inhalation of vapour may cause lung oedema (see Notes). The substance may cause effects on the central nervous system. Exposure above the OEL could cause lowering of consciousness.

PHYSICAL PROPERTIES

Boiling point: 137/C

Relative density (water = 1): 0.92

Solubility in water, g/100 ml: 19

Vapour pressure, kPa at 25/C: 1.25

Relative vapour density (air = 1): 4.15

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.04

Flash point: 33/C c.c.

Explosive limits, vol% in air: see Notes

Octanol/water partition coefficient as log Pow: 0.5

ENVIRONMENTAL DATA

NOTES

Explosive limits are unknown in literature, although the substance is combustible and has a flash point < 61/C.

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 is therefore essential.

Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

Check for peroxides prior to distillation; eliminate if found.

Card has been partly updated in April 2005. See sections Occupational Exposure Limits, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

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