

2-BUTOXYETHANOL

0059

April 1993

CAS No: 111-76-2
RTECS No: KJ8575000
UN No: 2369
EC No: 603-014-00-0

Ethylene glycol monobutyl ether
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 $C_6H_{14}O_2$ / $CH_3(CH_2)_2CH_2OCH_2CH_2OH$
Molecular mass: 118.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames. NO contact with oxidizing agents.	Powder, alcohol-resistant foam, water spray, carbon dioxide.
EXPLOSION	Above 61 °C explosive vapour/air mixtures may be formed.	Above 61 °C closed system, ventilation.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Cough, drowsiness, headache, nausea.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest, and refer for medical attention.
Skin	MAY BE ABSORBED! Dry skin (further see Inhalation).	Protective gloves, protective clothing.	Remove contaminated clothes, rinse skin with plenty of water or shower, and refer for medical attention.
Eyes	Redness, pain, blurred vision.	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	Abdominal pain, diarrhoea, nausea, vomiting (further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth, give plenty of water to drink, induce vomiting (ONLY IN CONSCIOUS PERSONS!), and refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible, wash away remainder with plenty of water.	Xn Symbol R: 20/21/22-37 S: 24/25 UN Hazard Class: 6.1 UN Pack Group: III Airtight. Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
NFPA Code: H 2; F 2; R 0	Separated from strong oxidants, food and feedstuffs; keep in the dark.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical Dangers

The substance can form explosive peroxides. The substance decomposes, producing toxic fumes. Reacts with strong oxidants, causing fire and explosion hazard.

Occupational Exposure Limits

TLV: 25 ppm; 121 mg/m³ (as TWA) (skin) (ACGIH 1992-1993)

Routes of Exposure

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

Inhalation Risk

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

Effects of Short-term Exposure

The substance irritates the eyes, the skin, and the respiratory tract. Exposure could cause central nervous system depression and liver and kidney damage.

Effects of Long-term or Repeated Exposure

The liquid defats the skin. The substance may have effects on the haematopoietic system, resulting in blood disorders.

PHYSICAL PROPERTIES

Boiling point: 171°C

Melting point: -75°C

Relative density (water = 1): 0.90

Solubility in water: miscible

Vapour pressure, kPa at 20°C: 0.10

Relative vapour density (air = 1): 4.1

Relative density of the vapour/air-mixture at 20°C (air = 1): 1.00

Flash point: (c.c.) 61°C

Auto-ignition temperature: 238°C

Explosive limits, vol% in air: 1.1-12.7

Octanol/water partition coefficient as log Pow: 0.830

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to the water environment and aquifer.

NOTES

Depending on the degree of exposure, periodic medical examination is indicated. Check for peroxides prior to distillation; render harmless if positive. Keep in dark because of possible formation of explosive peroxides.

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