

sec-BUTYL ACETATE

0840

November 2003

CAS No: 105-46-4
 RTECS No: AF7380000
 UN No: 1123
 EC No: 607-026-00-7

1-Methylpropyl acetate
 Acetic acid, 2-butyl ester
 $C_6H_{12}O_2$ / $CH_3COOCH(CH_3)CH_2CH_3$
 Molecular mass: 116.16

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Foam, alcohol-resistant foam, dry powder, 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.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE			
Inhalation	Cough. Sore throat. Dizziness. Headache.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Nausea.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Remove all ignition sources. Ventilation. 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. Do NOT wash away into sewer. (Extra personal protection: filter respirator for organic gases and vapours.)	F Symbol R: 11-66 S: (2-)16-23-25-29-33 Note: C UN Hazard Class: 3 UN Pack Group: II

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-30S1123-II NFPA Code: H1; F3; R0	Fireproof. Separated from strong oxidants, strong bases, strong acids.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Physical dangers

The vapour mixes well with air, explosive mixtures are easily formed.

Chemical dangers

Reacts with strong oxidants, strong acids and strong bases, causing fire and explosion hazard.

Occupational exposure limits

TLV: 200 ppm as TWA; (ACGIH 2003).

MAK: IIb (see Notes) (DFG 2003).

Routes of exposure

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

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 vapour is mildly irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system. Exposure far above the OEL could cause lowering of consciousness.

Effects of long-term or repeated exposure

The liquid defats the skin.

PHYSICAL PROPERTIES

Boiling point: 112°C

Melting point: -99°C

Relative density (water = 1): 0.87

Solubility in water, g/100 ml at 20°C: 0.8

Vapour pressure, kPa at 20°C: 1.33

Relative vapour density (air = 1): 4.0

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

Flash point: 17°C c.c.

Explosive limits, vol% in air: 1.7-9.8

Octanol/water partition coefficient as log Pow: 1.51

ENVIRONMENTAL DATA

NOTES

Health effects of exposure to the substance have not been investigated adequately.

Environmental effects from the substance have not been investigated adequately.

MAK value not established but full documentation is available (MAK IIb).

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