

**METHYL ETHYL KETONE****0179**

March 1998

**CAS No: 78-93-3**

RTECS No: EL6475000

UN No: 1193

EC No: 606-002-00-3

Ethyl methyl ketone

2-Butanone

MEK

Methyl acetone

C<sub>4</sub>H<sub>8</sub>O / CH<sub>3</sub>COCH<sub>2</sub>CH<sub>3</sub>

Molecular mass: 72.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
<b>EXPLOSION</b>	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			
<b>Inhalation</b>	Cough. Dizziness. Drowsiness. Headache. Nausea. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Eyes</b>	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Unconsciousness. (Furthersee Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
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. Personal protection: self-contained breathing apparatus.	F Symbol Xi Symbol R: 11-36-66-67 S: (2-)9-16 Note: 6 UN Hazard Class: 3 UN Pack Group: II

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30S1193 NFPA Code: H1; F3; R0.	Fireproof. Separated from strong oxidants, strong acids. Cool. Well closed.

## IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

**Physical dangers**

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

**Chemical dangers**

Reacts violently with strong oxidants and inorganic acids causing fire and explosion hazard. Attacks some plastic.

**Occupational exposure limits**

TLV: 200 ppm as TWA; 300 ppm as STEL; BEI issued; (ACGIH 2004).

MAK: 200 ppm, 600 mg/m<sup>3</sup>; H; Peak limitation category: I(1);

Pregnancy risk group: C; (DFG 2004).

**Routes of exposure**

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

**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 and the respiratory tract.

The substance may cause effects on the central nervous system. Exposure far above the OEL may result in unconsciousness.

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

The liquid defats the skin. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

## PHYSICAL PROPERTIES

Boiling point: 80/C

Melting point: -86/C

Relative density (water = 1): 0.8

Solubility in water, g/100 ml at 20/C: 29

Vapour pressure, kPa at 20/C: 10.5

Relative vapour density (air = 1): 2.41

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.1

Flash point: -9/C (c.c.)

Auto-ignition temperature: 505/C

Explosive limits, vol% in air: 1.8-11.5

Octanol/water partition coefficient as log Pow: 0.29

## ENVIRONMENTAL DATA

## NOTES

The odour warning when the exposure limit value is exceeded is insufficient.

Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, 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