

METHYL ACETATE**0507**

October 1997

CAS No: 79-20-9
 RTECS No: AI9100000
 UN No: 1231
 EC No: 607-021-00-X

Acetic acid methyl ester
 $C_3H_6O_2$ / CH_3COOCH_3
 Molecular mass: 74.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Use non-sparking handtools.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE			
Inhalation	Cough. Drowsiness. Dullness. Headache. Laboured breathing. Sore throat. Unconsciousness. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
Skin	Dry skin. Redness. Roughness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. 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. Nausea. Vomiting. Weakness. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL

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.

PACKAGING & LABELLING

F Symbol
 Xi Symbol
 R: 11-36-66-67
 S: (2-)16-26-29-33
 Note: 6
 UN Hazard Class: 3
 UN Pack Group: II

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-30S1231
 NFPA Code: H1; F3; R0

SAFE STORAGE

Fireproof. Separated from strong oxidants, acids. Cool. Keep in the dark. 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

The substance decomposes on heating under influence of air, bases, strong oxidants, UV-light, causing fire and explosion hazard. The substance is a strong reducing agent and reacts with oxidants. Attacks many metals in presence of water. Attacks plastic.

Occupational exposure limits

TLV: 200 ppm as TWA; 250 ppm as STEL; (ACGIH 2004).
MAK: 100 ppm, 310 mg/m³; Peak limitation category: I(4);
Pregnancy risk group: C; (DFG 2005).

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 irritates the eyes and the respiratory tract. The substance may cause effects on the central nervous system, resulting in lowering of consciousness. Exposure far above the OEL may result in death.

Effects of long-term or repeated exposure

The liquid defats the skin. The substance may have effects on the optic nerve, resulting in impaired vision.

PHYSICAL PROPERTIES

Boiling point: 57/C

Melting point: -98/C

Relative density (water = 1): 0.93

Solubility in water, g/100 ml at 20/C: 24.4

Vapour pressure, kPa at 20/C: 21.7

Relative vapour density (air = 1): 2.6

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.3

Flash point: -13/C c.c.

Auto-ignition temperature: 455/C

Explosive limits, vol% in air: 3.1-16

Octanol/water partition coefficient as log Pow: 0.18

ENVIRONMENTAL DATA

NOTES

The symptoms of damage to the optical nerve do not become manifest until a few hours have passed.

Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

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

Devoton, Tereton are trade names.

Card has been partly updated in October 2004 and 2005. 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 for the use which might be made of this information