

METHANOL

0057
April 2000

CAS No: 67-56-1
RTECS No: PC1400000
UN No: 1230
EC No: 603-001-00-X

Methyl alcohol
Carbinol
Wood alcohol
CH₄O / CH₃OH
Molecular mass: 32.0

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS | PREVENTION | FIRST AID/FIRE FIGHTING |
|---------------------------|------------------------------------|---|---|
| FIRE | Highly flammable. See Notes. | NO open flames, NO sparks, and NO smoking. NO contact with oxidants. | Powder, alcohol-resistant foam, water in large amounts, 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. Use non-sparking handtools. | In case of fire: keep drums, etc., cool by spraying with water. |

| EXPOSURE | | AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN! | |
|-------------------|--|--|---|
| Inhalation | Cough. Dizziness. Headache. Nausea. Weakness. Visual disturbance. | Ventilation. Local exhaust or breathing protection. | Fresh air, rest. Refer for medical attention. |
| Skin | MAY BE ABSORBED! Dry skin. Redness. | Protective gloves. Protective clothing. | Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention. |
| Eyes | Redness. Pain. | 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. Shortness of breath. Vomiting. Convulsions. Unconsciousness. (Further see Inhalation). | Do not eat, drink, or smoke during work. Wash hands before eating. | Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention. |

| SPILLAGE DISPOSAL | PACKAGING & LABELLING |
|---|---|
| Evacuate danger area! Ventilation. Collect leaking liquid in sealable containers. Wash away remainder with plenty of water. Remove vapour with fine water spray. Chemical protection suit including self-contained breathing apparatus. | F Symbol T Symbol R: 11-23/24/25-39/23/24/25 S: (1/2-)7-16-36/37-45 UN Hazard Class: 3 UN Subsidiary Risks: 6.1 UN Pack Group: II Do not transport with food and feedstuffs. |

| EMERGENCY RESPONSE | STORAGE |
|--|---|
| Transport Emergency Card: TEC (R)-36 NFPA Code: H 1; F 3; R 0 | Fireproof. Separated from strong oxidants, food and feedstuffs. Cool. |

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 violently with oxidants causing fire and explosion hazard.

Occupational exposure limits

TLV: 200 ppm; as TWA (skin) (ACGIH 1999).
TLV (as STEL): 250 ppm; (skin) (ACGIH 1999).

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 can be reached rather quickly on evaporation of this substance at 20°C.

Effects of short-term exposure

The substance irritates the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system, resulting in loss of consciousness. Exposure may result in blindness and death. The effects may be delayed. Medical observation is indicated.

Effects of long-term or repeated exposure

Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the central nervous system, resulting in persistent or recurring headaches and impaired vision.

PHYSICAL PROPERTIES

Boiling point: 65°C
Melting point: -98°C
Relative density (water = 1): 0.79
Solubility in water: miscible
Vapour pressure, kPa at 20°C: 12.3
Relative vapour density (air = 1): 1.1

Relative density of the vapour/air-mixture at 20°C (air = 1): 1.01
Flash point: 12°C c.c.
Auto-ignition temperature: 464°C
Explosive limits, vol% in air: 5.5-44.
Octanol/water partition coefficient as log Pow: -0.82/-0.66

ENVIRONMENTAL DATA

NOTES

Burns with nonluminous bluish flame.
Depending on the degree of exposure, periodic medical examination is indicated.

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