

METHYL BROMIDE**0109**
April 1994CAS No: 74-83-9
RTECS No: PA4900000
UN No: 1062
EC No: 602-002-00-2Bromomethane
Monobromomethane
(cylinder)
CH₃Br
Molecular mass: 94.9

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS | PREVENTION | FIRST AID/FIRE FIGHTING |
|---|--|---|---|
| FIRE | Combustible under specific conditions. Gives off irritating or toxic fumes (or gases) in a fire. | NO open flames. NO contact with aluminium, zinc, magnesium or pure oxygen. | Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with - use appropriate extinguishing agent. |
| EXPLOSION | Risk of fire and explosion on contact with aluminium, zinc or magnesium. | | In case of fire: keep cylinder cool by spraying with water. |
| EXPOSURE | | STRICT HYGIENE! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN! | IN ALL CASES CONSULT A DOCTOR! |
| Inhalation | Dizziness. Headache. Abdominal pain. Vomiting. Weakness. Hallucinations. Loss of speech. Incoordination. Laboured breathing. Convulsions. | Ventilation, local exhaust, or breathing protection. | Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention. |
| Skin | MAY BE ABSORBED! Tingling. Itching. Burning sensation. Redness. Blisters. Pain. ON CONTACT WITH LIQUID: FROSTBITE. (Further see Inhalation). | Cold-insulating gloves. Protective clothing. | ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Rinse skin with plenty of water or shower. Refer for medical attention. |
| Eyes | Redness. Pain. Blurred vision. Temporary loss of vision. | Safety goggles, face shield 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 | | | |
| SPILLAGE DISPOSAL | | PACKAGING & LABELLING | |
| Evacuate danger area! Consult an expert! Ventilation. NEVER direct water jet on liquid. Personal protection: complete protective clothing including self-contained breathing apparatus. | | T Symbol N Symbol R: 23/25-36/37/38-48/20-68-50-59 S: (1/2-)15-27-36/39-38-45-59-61 UN Hazard Class: 2.3 | |
| EMERGENCY RESPONSE | | SAFE STORAGE | |
| Transport Emergency Card: TEC (R)-20S1062 NFPA Code: H 3; F 1; R 0 | | Fireproof if in building. Separated from strong oxidants, aluminium and cylinders containing oxygen. Cool. Ventilation along the floor. | |

IMPORTANT DATA

Physical State; Appearance

ODOURLESS AND COLOURLESS COMPRESSED LIQUEFIED GAS.

Physical dangers

The gas is heavier than air.

Chemical dangers

The substance decomposes on heating and on burning producing toxic and corrosive fumes including hydrogen bromide, bromine and carbon oxybromide. Reacts with strong oxidants. Attacks many metals in presence of water. Attacks aluminium, zinc and magnesium with formation of pyrophoric compounds, causing fire and explosion hazard.

Occupational exposure limits

TLV: 1 ppm as TWA; (skin); A4 (not classifiable as a human carcinogen); (ACGIH 2004).
MAK: skin absorption (H); Carcinogen category: 3B; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation and through the skin, also as a vapour!

Inhalation risk

A harmful concentration of this gas in the air will be reached very quickly on loss of containment.

Effects of short-term exposure

The substance irritates the eyes, the skin and the respiratory tract. Inhalation of the substance may cause lung oedema (see Notes). Rapid evaporation of the liquid may cause frostbite. The substance may cause effects on the central nervous system, kidneys and lungs. Exposure to high concentrations may result in death. The effects may be delayed.

Effects of long-term or repeated exposure

The substance may have effects on the nervous system, kidneys, heart, liver and lungs.

PHYSICAL PROPERTIES

Boiling point: 4/C
Melting point: -94/C

Relative density (water = 1): 1.7

Solubility in water, ml/100 ml at 20/C: 1.5

Relative vapour density (air = 1): 3.3

Auto-ignition temperature: 537/C

Explosive limits, vol% in air: 10-16

Octanol/water partition coefficient as log Pow: 1.19

ENVIRONMENTAL DATA

This substance may be hazardous in the environment; special attention should be given to fish, mammals, plants, soil organisms.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.

The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential.

Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

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

Turn leaking cylinder with the leak up to prevent escape of gas in liquid state.

Bromo-O-gas, Dowfume, Embafume, Halon 1001, Haltox, Meth-o-gas, Terabol and Terr-o-Gas 100 are trade names.

Card has been partly updated in October 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