



# MATERIAL SAFETY DATA SHEET

Cardinal Professional Products  
P.O. Box 782 • 8770 Highway 25 • Hollister, CA 95023

EMERGENCY PHONE NUMBERS: (800) 655-7262, CHEMTREC (800) 424-9300

## 1. PRODUCT IDENTIFICATION

PRODUCT NAME:	METHYL BROMIDE 100
CHEMICAL NAME AND SYNONYMS: Methyl Bromide	monobromomethane, MeBr, MB
CHEMICAL FAMILY: Methyl Bromide	brominated hydrocarbons
FORMULA: Methyl Bromide	CH <sub>3</sub> Br
CAS NO.: Methyl Bromide	74-83-9

## 2. HAZARDOUS INGREDIENTS

PRODUCT COMPONENTS (Percent Composition By Weight):

<u>Product</u> Methyl Bromide 100	<u>Methyl Bromide</u> 100.0
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PERMISSIBLE EXPOSURE LEVELS OF PRODUCT COMPONENTS:

<u>Chemical</u> Methyl Bromide	<u>TLV (ACGIH)</u> 5. ppm
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## 3. PHYSICAL DATA

BOILING POINT:	38.4°F/3°C
VAPOR PRESSURE:	1400 mmHg @ 68°F/20°C
VAPOR DENSITY:	3.27 (air = 1)
SOLUBILITY IN WATER:	1.34 gms/100 ml @ 77°F/25°C
SPECIFIC GRAVITY:	1.732 @ 32°F/0°C (H <sub>2</sub> O = 1)
PERCENT VOLATILE:	100% (by volume)
APPEARANCE:	Colorless, clear liquid below 38.4°F/3°C, gaseous above this temperature.
ODOR:	No odor.

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**4. FIRE AND EXPLOSION HAZARD DATA**

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FLASH POINT: None  
FLAMMABLE LIMITS: (At S.T.P.) Lel 10%, Uel 15% with high energy ignition source.  
EXTINGUISHING: Water fog for cooling; foam; alcohol foam; CO<sub>2</sub> a dry chemical.  
SPECIAL FIRE FIGHTING PROCEDURES: Cool cylinders with water fog to maintain temperature below 175°C/347°F. Wear self-contained breathing apparatus and work from safe, protective position.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Cylinders may rupture violently and release toxic gas due to over pressure when exposed to temperatures in excess of 175°C/347°F.

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**5. HEALTH HAZARD DATA FOR METHYL BROMIDE**

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EXPOSURE LIMITS: See "Hazardous Components" Section

GENERAL INFORMATION: Extremely hazardous liquid and vapor under pressure. Inhalation may be fatal or cause serious acute illness or delayed lung or nervous system injury. Do not breath vapors. Liquid or excessive vapor can cause serious skin or eye injury which may have a delayed onset. Do not get liquid on skin, in eyes, or on clothing.

EFFECTS OF OVEREXPOSURE: Inhalation: Early symptoms of overexposure to methyl bromide are dizziness, head dizziness, headache, nausea and vomiting, weakness and collapse. Lung edema may develop in 2 to 48 hours after exposure, accompanied by cardiac irregularities. Repeated overexposure can result in blurred vision, staggering gait, and mental imbalance, with probable recovery after a period of no exposure. In extreme cases of overexposure, unconsciousness and death can occur.

Skin and Eye Contact: Liquid can cause severe burns to eyes and skin. Liquid spilled on clothing, shoes, watches, rings, bandages, etc. can expose the skin to high levels of methyl bromide vapor which can cause blistering or burns.

Ingestion: N/A

EMERGENCY AND  
FIRST AID  
PROCEDURES:

Inhalation: Get exposed person to fresh air. Keep warm. Make sure person can breathe freely. If breathing has stopped, give artificial respiration. Give oxygen if needed. Seek medical attention.

Eyes: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes.

Skin: Immediately remove contaminated clothing, shoes, and other items covering the skin. Wash contaminated skin area thoroughly with soap and water. Do not wear contaminated clothing.

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**6. REACTIVITY DATA**

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Containers may rupture violently in fire or high temperatures.

**INCOMPATIBILITY:** Do not use aluminum, magnesium, zinc, or alloys of aluminum and magnesium, or zinc coated steel.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen bromide.

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**7. SPILL OR LEAK PROCEDURES**

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**STEPS TO BE TAKEN IF MATERIAL IS LEAKED OR SPILLED:** Evacuate the immediate area of the spill or leak. Use SCBA or combination air-supplied/SCBA respirator for entry into the affected area to correct problem. Move leaking or damaged cylinders or containers outdoors or to an isolated location, observing strict safety precautions. Work up wind if possible. Allow spill to evaporate. Do not permit entry into spill area by unprotected persons until the concentration of methyl bromide is determined to be less than 5 ppm (20 mg/cu.m)

**WASTE DISPOSAL METHOD:**

- (1) Return cylinders to the dealer or distributor according to label instructions.
- (2) Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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**8. SPECIAL PROTECTION INFORMATION**

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- RESPIRATORY PROTECTION:** If the concentration of methyl bromide in the working area, as measured by a direct-reading detector device (such as a Draeger gas detector) does not exceed 5 ppm (20 mg/cu.m), no respiratory protection is required. If this concentration is exceeded at any time, all persons in the area must wear a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator (such as a U.S. Divers' Survivair or comparable device).
- VENTILATION:** Sufficient to reduce concentration to TLV.  
Local Exhaust: From point of origin of fumes.  
General: Provide exhaust from inside of building.
- PROTECTIVE CLOTHING:** Do not wear gloves of any type, or rubber protective clothing, or rubber boots. Do not wear jewelry on hands. Methyl Bromide is heavier than air and may be trapped by clothing or jewelry and cause skin injury. Wear loose clothing and socks that are cleaned after each wearing.
- EYE PROTECTION:** Wear goggles or full face shield for eye protection when handling liquid.

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**9. SPECIAL PRECAUTIONS**

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- HANDLING AND STORAGE:** Read label instructions before use. Store in dry, cool, well-ventilated area under lock and key. Post as a pesticide storage area. Do not contaminate water, food, or feed by storage. Store cylinders upright, secured to a rack or wall to prevent tipping. Keep valves closed, and safety caps and valve protection bonnets in place when not in use.

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For Additional Non-Emergency MSDS Information, Contact:

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