

METHYL BROMIDE FACT SHEET

North Carolina Division of Public Health • Occupational and Environmental Epidemiology Branch

Chemical Information

- Colorless gas at room temperature.
- Colorless liquid below 38.5°F or when compressed.
- Shipped as liquefied compressed gas.
- Nonflammable and toxic at low concentrations.
- Heavier than air and can accumulate in poorly ventilated or low-lying areas.
- Odorless and non-irritating at low concentrations; has a musty or fruity, sweet or floral odor at high concentrations.
- Toxic by inhalation and skin absorption.
- Strong skin irritant.
- Soil and termite fumigant.

Hazards Identification

Acute Exposure:

- Can cause headache, nausea, vomiting, dizziness, confusion, weakness, spasms, and seizures.
- May cause eye, respiratory, and throat irritation, shortness of breath, coughing, congestion, and chest pain.
- May cause skin irritation, numbness/tingling, itching, burns, and blistering.
- Exposure to high concentrations may cause bronchi or lung inflammation, a build-up of fluid in the lungs, respiratory arrest, and irritation of the eyes and nose and may be fatal.

Chronic Exposure:

- May cause impaired gait, behavioral changes, and mild liver and kidney dysfunction and nerve damage.
- Prolonged or repeated exposure may result in burns or blisters.
- The Environmental Protection Agency (EPA) Acute Exposure Guideline Level 2 (AEGL - 2) for methyl bromide is 67 ppm for an 8-hour period.

Stability & Reactivity

- Reacts with strong oxidizers, magnesium, tin, zinc, and alloys.
- Reacts with aluminum for aluminum trimethyl, which is spontaneously flammable.

Handling & Storage

- Store in upright cylinders secured to a rack or wall to prevent tipping.
- Store in a cool, dry, well-ventilated location and isolate from active metals.

Glossary

The Environmental Protection Agency (EPA) defines Acute Exposure Guideline Levels (AEGLs) as threshold exposure limits for the general public that are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three AEGLs are defined as follows:

AEGL-1 – airborne concentration of a substance at which the general population could experience notable discomfort, irritation or certain asymptomatic non-sensory effects.

AEGL-2 – airborne concentration of a substance at which the general population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL-3 – airborne concentration of a substance at which the general population could experience life threatening health effects or death.

