**Section 1 - IDENTIFICATION**

<table>
<thead>
<tr>
<th>GHS product identifier</th>
<th>Methyl Bromide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>bromomethane</td>
</tr>
<tr>
<td>Other means of</td>
<td>Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema</td>
</tr>
<tr>
<td>identification</td>
<td>Synthetic/Analytical chemistry. Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema</td>
</tr>
<tr>
<td>Product use Synonym</td>
<td>Synthetic/Analytical chemistry. Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema</td>
</tr>
</tbody>
</table>

**Section 2 - HAZARDS IDENTIFICATION**

<table>
<thead>
<tr>
<th>OSHA/HCS status</th>
<th>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</th>
</tr>
</thead>
</table>
| Classification of the substance or mixture | FLAMMABLE GASES - Category 1  
GASES UNDER PRESSURE - Compressed gas  
ACUTE TOXICITY (inhalation) - Category 2  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
GERM CELL MUTAGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS) and kidneys) - Category 2  
AQUATIC HAZARD (ACUTE) - Category 1  
AQUATIC HAZARD (LONG-TERM) - Category 1  
HAZARDOUS TO THE OZONE LAYER - Category 1 |

**GHS label elements**

- **Hazard pictograms**

- **Signal word** Danger
- **Hazard statements**
  - Extremely flammable gas.
  - May form explosive mixtures with air.
  - Contains gas under pressure; may explode if heated.
  - Fatal if inhaled.
  - Causes serious eye irritation.
  - Causes skin irritation.
  - May cause respiratory irritation.
  - Suspected of causing genetic defects.
May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys)
Very toxic to aquatic life with long lasting effects.
Harms public health and the environment by destroying ozone in the upper atmosphere.

Precautionary statements

General
Read and follow all Safety Data Sheets (SDS’S) before use. Read label before use.
Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

Prevention
Never Put cylinders into unventilated areas of passenger vehicles. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe gas. Wash hands thoroughly after handling. Use and store only outdoors or in a well ventilated place.

Response
Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

Storage
Store locked up. Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

Disposal
Dispose of contents and container in accordance with all local, regional, national and international regulations. Refer to manufacturer/supplier for information on recovery/recycling.

Hazards not otherwise classified
In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

** **Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS** **

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>bromomethane</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Methane, bromo-; Bromomethane; Curafume; Embafume; Halon 1001; Haltox; Iscobrome; Monobromomethane; Terabol; CH3Br; Bercema</td>
</tr>
<tr>
<td>CAS number/other identifiers</td>
<td></td>
</tr>
<tr>
<td>CAS number</td>
<td>74-83-9</td>
</tr>
<tr>
<td>Product code</td>
<td>001035</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>100</td>
<td>74-83-9</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.
**Section 4 - FIRST AID MEASURES**

**Description of necessary first aid measures**

**Eye contact**
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation**
Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**
As this product is a gas, refer to the inhalation section.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**
Causes serious eye irritation. Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation**
Fatal if inhaled. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**
Causes skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.

**Frostbite**
Try to warm up the frozen tissues and seek medical attention.

**Ingestion**
Irritating to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.

**Over-exposure signs/symptoms**

**Eye contact**
Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

**Inhalation**
Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

**Skin contact**
Adverse symptoms may include the following:
- irritation
- redness

**Ingestion**
No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**
No specific treatment.

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
**Section 5 - FIRE FIGHTING MEASURES**

**Extinguishing media**

**Suitable extinguishing media**
Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products**
Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
- Halogenated compounds
- Carbonyl halides

**Special protective actions for fire-fighters**
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Section 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**
Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**Methods and materials for containment and cleaning up**
** Section 7 - HANDLING AND STORAGE **

** Precautions for safe handling **

** Protective measures **

Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe gas. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

** Advice on general occupational hygiene **

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

** Conditions for safe storage, including any incompatibilities **

Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 ºC (125 ºF).

** Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION **

** Occupational exposure limits **

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>ACGIH TLV (United States, 3/2012).</td>
</tr>
<tr>
<td></td>
<td>Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>TWA: 3.9 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States, 6/2010).</td>
</tr>
<tr>
<td></td>
<td>Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>CEIL: 80 mg/m³</td>
</tr>
<tr>
<td></td>
<td>CEIL: 20 ppm</td>
</tr>
<tr>
<td></td>
<td>Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 ppm 8 hours.</td>
</tr>
</tbody>
</table>
**Appropriate engineering controls**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

**Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

---

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Gas. [Compressed gas.]</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Colorless.</td>
</tr>
<tr>
<td><strong>Molecular weight</strong></td>
<td>94.95 g/mole</td>
</tr>
<tr>
<td><strong>Molecular formula</strong></td>
<td>C-H3-Br</td>
</tr>
<tr>
<td><strong>Boiling/condensation point</strong></td>
<td>3.5°C (38.3°F)</td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>-93.66°C (-136.6°F)</td>
</tr>
<tr>
<td><strong>Critical temperature</strong></td>
<td>190.85°C (375.5°F)</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Odorless.</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Material Name: Methyl Bromide

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: 536.85°C (998.3°F)</td>
</tr>
<tr>
<td>Burning time</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Burning rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable)</td>
<td>Lower: 8.6%</td>
</tr>
<tr>
<td>limits</td>
<td>Upper: 15%</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>27.7 (psia)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>3.3 (Air = 1)</td>
</tr>
<tr>
<td>Specific Volume (ft³/lb)</td>
<td>4.0323</td>
</tr>
<tr>
<td>Gas Density (lb/ft³)</td>
<td>0.248</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in water Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>1.99</td>
</tr>
<tr>
<td></td>
<td>537°C (998.6°F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>SADT</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Section 10 - STABILITY AND REACTIVITY**

Reactivity
No specific test data related to reactivity available for this product or its ingredients.

Chemical stability
The product is stable.

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid
Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas.

Incompatibility with various substances
Highly reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization
Under normal conditions of storage and use, hazardous polymerization will not occur.
**Section 11 - TOXICOLOGICAL INFORMATION**

### Information on toxicological effects

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>850 ppm</td>
<td>1 hours</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

- **Sensitization**
  - Not available.

- **Mutagenicity**
  - Not available.

**Carcinogenicity**

- Not available.

**Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**

- Not available.

**Teratogenicity**

- Not available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>Category 2</td>
<td>Not determined</td>
<td>central nervous system (CNS) and kidneys</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

- Not available.

**Information on the likely routes of exposure**

- Not available.

**Potential acute health effects**

**Eye contact**

Causes serious eye irritation. Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation**

Fatal if inhaled. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**

Causes skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.

**Ingestion**

Irritating to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.
Safety Data Sheet

Material Name: Methyl Bromide

Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>pain or irritation</td>
</tr>
<tr>
<td></td>
<td>watering</td>
</tr>
<tr>
<td></td>
<td>redness</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>respiratory tract irritation</td>
</tr>
<tr>
<td></td>
<td>coughing</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>irritation</td>
</tr>
<tr>
<td></td>
<td>redness</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

Delayed and immediate effects and also chronic effects from short and long term exposure

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Short term exposure</th>
<th>Potential immediate effects</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long term exposure</td>
<td>Potential immediate effects</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential delayed effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Potential chronic health effects

- General: May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity: No known significant effects or critical hazards.
- Mutagenicity: Suspected of causing genetic defects.
- Teratogenicity: No known significant effects or critical hazards.
- Developmental effects: No known significant effects or critical hazards.
- Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

**Section 12 - ECOLOGICAL INFORMATION**

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>Acute EC50 1700 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.6 µg/l Fresh water</td>
<td>Fish - Poecilia reticulata</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.
Material Name: Methyl Bromide

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>1.99</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

**Soil/water partition coefficient (K_{oc})**
Not available.

**Other adverse effects**
No known significant effects or critical hazards.

**Section 13 - DISPOSAL CONSIDERATIONS**

Disposal methods
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

United States - RCRA Toxic hazardous waste "U" List

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Status</th>
<th>Reference number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl bromide; Methane, bromo-</td>
<td>74-83-9</td>
<td>Listed</td>
<td>U029</td>
</tr>
</tbody>
</table>

**Section 14 - TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT</th>
<th>TDG</th>
<th>Mexico</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1062</td>
<td>UN1062</td>
<td>UN1062</td>
<td>UN1062</td>
<td>UN1062</td>
<td>UN1062</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>METHYL BROMIDE</td>
<td>METHYL BROMIDE</td>
<td>Methyl Bromide</td>
<td>METHYL BROMIDE WITH NOT MORE THAN 2.0% CHLOROPICRIN</td>
<td>METHYL BROMIDE WITH NOT MORE THAN 2% CHLOROPICRIN</td>
</tr>
<tr>
<td>2.3</td>
<td>2.3</td>
<td>2.3 (2.1)</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
| Additional information | Inhalation hazard zone B | Explosive Limit and Limited Quantity Index 0 | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg, | The environmentally hazardous substance mark may appear if required by other transportation regulations. **Passenger and Cargo** | AircraftQuantity limitation: 0 Forbidden
|                  | ERAP Index 25 | Passenger Carrying Ship Index | Forbidden | Cargo Aircraft Only | Quantity limitation: 0 |
### Special Precautions for User

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**United States inventory (TSCA 8b):** This material is listed or exempted.

**Clean Water Act (CWA) 307:** bromomethane

#### Reportable Quantity
1000 lbs / 454 kg

Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Limited quantity:** Yes.

**Packaging instruction**

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Quantity Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger aircraft</td>
<td>Forbidden</td>
</tr>
<tr>
<td>Cargo aircraft</td>
<td>Forbidden</td>
</tr>
</tbody>
</table>

**Special provisions**

3, B14, T50, 153

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"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

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**Section 15 - Regulatory Information**

- **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
- **United States inventory (TSCA 8b):** This material is listed or exempted.
- **Clean Water Act (CWA) 307:** bromomethane

- **Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs):** Listed
- **Clean Air Act Section 602 Class I Substances:** Listed
- **Clean Air Act Section 602 Class II Substances:** Not listed
- **DEA List I Chemicals (Precursor Chemicals):** Not listed
- **DEA List II Chemicals (Essential Chemicals):** Not listed
- **SARA 302/304 Composition/information on ingredients**

---

Page 11 of 14
Material Name: Methyl Bromide

### SARA 313

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>EHS</th>
<th>SARA 302 TPQ (lbs)</th>
<th>SARA 304 RQ (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>100</td>
<td>Yes.</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**SARA 304 RQ** Not applicable.

**SARA 311/312**

**Classification**
- Fire hazard
  - Sudden release of pressure
  - Immediate (acute) health hazard
  - Delayed (chronic) health hazard

### Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>100</td>
<td>Yes.</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements bromomethane</td>
<td>74-83-9</td>
<td>100</td>
</tr>
<tr>
<td>Supplier notification bromomethane</td>
<td>74-83-9</td>
<td>100</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- **Massachusetts**: This material is listed.
- **New York**: This material is listed.
- **New Jersey**: This material is listed.
- **Pennsylvania**: This material is listed.
- **California Prop. 65**

**WARNING**: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### Ingredient name

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>bromomethane</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
<td>810 µg/day (inhalation)</td>
</tr>
</tbody>
</table>

### Canada inventory

This material is listed or exempted.

### International regulations

#### International lists
- **Australia inventory (AICS)**: This material is listed or exempted.
- **China inventory (IECSC)**: This material is listed or exempted.
- **Japan inventory**: This material is listed or exempted.
- **Korea inventory**: This material is listed or exempted.
- **Malaysia Inventory (EHS Register)**: Not determined.
- **New Zealand Inventory of Chemicals (NZIoC)**: This material is listed or exempted.
- **Philippines inventory (PICCS)**: This material is listed or exempted.
- **Taiwan inventory (CSNN)**: Not determined.
Material Name: Methyl Bromide

**Chemical Weapons Convention List Schedule**

I Chemicals

Chemical Weapons Convention List Schedule

Not listed

II Chemicals

Chemical Weapons Convention List Schedule

Not listed

III Chemicals

Chemical Weapons Convention List Schedule

Not listed

**Canada**

WHMIS (Canada)

Class A: Compressed gas.
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

**CEPA Toxic substances**: This material is listed.

**Canadian ARET**: This material is not listed.

**Canadian NPRI**: This material is listed.

**Alberta Designated Substances**: This material is not listed.

**Ontario Designated Substances**: This material is not listed.

**Quebec Designated Substances**: This material is not listed.

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**Section 16 - OTHER INFORMATION**

Canada Label requirements

Class A: Compressed gas.
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

**NFPA Ratings**: Health: 2  Fire: 4  Reactivity: 3

Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States
Other Information

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