

TRI-BROM Methyl Bromide Fumigant 1000

1. IDENTIFICATION






PRODUCT IDENTIFIER:	TRI-BROM Methyl Bromide Fumigant 1000	SDS No.: 300-AUS-TCA
OTHER MEANS OF IDENTIFICATION:	Methyl Bromide, Bromomethane	
RECOMMENDED USE:	Fumigant for control of pests in stored or residual food products, agricultural commodities, and other materials and products as specified on the label for this product.	
RESTRICTIONS ON USE:	Only for use by Professional and Registered Fumigators for control of weeds, nematodes, soil and insect pests and rodents.	

DISTRIBUTER: TRICAL AUSTRALIA PTY LTD 4 Gidgie Court Edinburgh, SA 5111 Australia Customer Service: (08) 8347 3838 E-mail: info@trical.com.au	FOR CHEMICAL EMERGENCY (Spill, Leak, Fire, Exposure, or Accident), Call CHEMTREC: +61 2 9037 2994 (In-Country at Sydney, Australia, 24/7) or 001 (703) 527-3887 (24/7) (if outside the USA) Poisons Information Centre: Phone 13 1126 from anywhere in Australia
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NOTE TO PESTICIDE HANDLERS: If the pesticide product end-use labeling contains specific instructions or requirements that conflict with this Safety Data Sheet (SDS), **follow the instructions or requirements on the labeling.**

2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE HAZARDOUS CHEMICAL

 Gas Cylinder	 Toxicity	<ul style="list-style-type: none"> • Gases Under Pressure, Compressed Gas • Acute Toxicity – Inhalation, Category 2 • Acute Toxicity – Oral, Category 3 • Skin Corrosion/Irritation, Category 2 • Eye Damage/Irritation, Category 2A • Germ Cell Mutagenicity, Category 2 • Specific Target Organ Toxicity, Single Exposure, Category 3 (Respiratory) • Specific Target Organ Toxicity, Repeat Exposure, Category 2 (Nervous system, lungs, stomach, kidney, heart) • Hazardous to the Aquatic Environment, Short Term (Acute) Hazard, Category 1 • Hazardous to the Ozone Layer, Category 1
 Irritation	 Environmental Hazard	
 Health Hazard		

LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Signal Word	DANGER
HAZARD STATEMENTS	<ul style="list-style-type: none"> • Contains gas under pressure; may explode if heated. H280 • Fatal if inhaled. H331 • Toxic if swallowed. H301 • Causes skin irritation. H315 • Causes serious eye irritation. H319 • Suspected of causing genetic defects. H341 • May cause respiratory irritation. H335 • May cause damage to organs (Nervous system lungs, stomach, kidney, heart) through prolonged or repeated exposure. H373 • Very toxic to aquatic life. H400 • Harms public health and the environment by destroying ozone in the upper atmosphere. H420

PRECAUTIONARY STATEMENTS

<p>Prevention</p> <ul style="list-style-type: none"> • Obtain special instructions before use. P201 • Do not handle until all safety precautions have been read and understood. P202 • Do not breathe gas or vapours. P260 • Wash hands and face thoroughly after handling. P264 • Do not eat, drink, or smoke when using this product. P270 • Use only outdoors or in a well-ventilated area. P271 • Avoid release to the environment [except for authorised use] P273 • In case of inadequate ventilation, wear respiratory protection. P284 • Wear eye protection. P280 <p>Response</p> <ul style="list-style-type: none"> • IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. P301+P310+P330 • IF ON SKIN: Wash with plenty of water. P302+P352 • IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. P304+P340+P311 • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305+P351+P338 • IF exposed or concerned: Get medical attention. P308+P313 • If skin irritation occurs: Get medical attention. P332+P313 • If eye irritation persists: Get medical attention. P337+P313 • Take off contaminated clothing and wash it before reuse. P362+P364 <p>Storage</p> <ul style="list-style-type: none"> • Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed. P403+P233+P405 • Store locked up. P405 <p>Disposal</p> <ul style="list-style-type: none"> • Collect spillage. P391 • Dispose of contents and container in accordance with government regulations. (See Section 13). P501 • Refer to manufacturer or supplier for information on recovery or recycling. P502
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3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	Synonyms	CAS Number	Concentration by Weight %
Methyl Bromide	Bromomethane	74-83-9	100.0

4. FIRST AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES

Inhalation	IF INHALED: Get medical attention immediately. Remove to fresh air. Keep patient warm and at rest. Keep respiratory tract clear. Give oxygen or artificial respiration if needed. Gently wipe or rinse the inside of the mouth with water.
Skin	IF ON SKIN OR CLOTHING: Get medical attention immediately. Take off contaminated clothing and shoes immediately. Wash off with soap and water.
Eyes	IF IN EYES: Get medical attention immediately. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion	IF SWALLOWED: Get medical attention immediately. Never give anything by mouth to an unconscious person.

SYMPTOMS CAUSED BY EXPOSURE

Most Important Symptoms/Effects, Acute and Delayed	Symptoms may be delayed. Dizziness, blurred vision, weakness, staggering gait, slurred speech, nausea, vomiting, and loss of appetite may occur. Effects of breathing high concentrations of vapour may include: convulsions, lung edema, lack of coordination, fatigue, corrosive effects, and death.
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MEDICAL ATTENTION AND SPECIAL TREATMENT

Indication of Immediate Medical Attention or Special Treatment.	Obtain medical assistance at once in case of illness after exposure, or if irritation to eyes and respiratory tract persist. Do not allow conditions that could cause further exposure until recovery is complete.
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General Advice	Have the product package or label with you when calling a Poisons Information Centre or doctor, or going for treatment. Do not give anything by mouth to an unconscious person. Ensure that medical personnel are aware of the material involved, and that they take precautions to protect themselves from exposure to vapour from patient's clothing or stomach contents.
Notes to Physician	For specialist advice, physicians should contact the Poisons Information Centre.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment	All conventional fire extinguishing media are suitable: water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Unsuitable Extinguishing Equipment	None
Specific Hazards Arising from the Chemical including Hazardous Combustion Products	<ul style="list-style-type: none"> • Container may explode if heated. • Burning produces noxious and toxic fumes. • Thermal decomposition can lead to release of irritating gases and vapours. • NOTE: Per transport regulations, cylinders are not equipped with relief valves or fusible overpressure devices.
Special Protective Equipment	<ul style="list-style-type: none"> • Wear self-contained breathing apparatus and full turnout gear for fire situations.
Precautions for Fire Fighters	<ul style="list-style-type: none"> • Stay upwind. • DO NOT approach containers suspected to be hot. • Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. • Evacuate area at least 100 metres (330 feet), initially. • If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 metres (1/2 mile) in all directions; also consider initial evacuation for 800 metres (1/2 mile) in all directions. • Move containers from fire area if you can do it without risk. • Damaged cylinders should only be handled by specialists. • For fires involving tanks: Cool containers with flooding quantities of water until well after fire is out. • For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific Extinguishing Methods	<ul style="list-style-type: none"> • Use a water spray to cool fully closed containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures	<ul style="list-style-type: none"> • Evacuate unnecessary personnel to safe areas at least 30 metres (100 feet). • Keep people away from and upwind of spill/leak but if downwind, at least 100 metres (330 feet). • Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). • Use proper personal protective equipment (PPE) as indicated in Section 8. • Do not breathe gas. Emergency personnel need self-contained breathing equipment. Ventilate closed spaces before entering them. • Avoid contact with skin and eyes. • After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. • Local authorities should be advised if significant spillages cannot be contained.
Environmental Precautions	<ul style="list-style-type: none"> • Toxic to aquatic life. • Do not allow contact with soil, surface or ground water. • Do not flush into surface water or sanitary sewer system. • Do not use product nearer than 10 m from streams and lakes. • Contact local authorities in case of spillage to drain/aquatic environment.
Methods and Materials for Containment	<ul style="list-style-type: none"> • Stop leak if you can do so without risk. • Isolate area until gas has dispersed.

Methods for Cleaning Up Small Liquid Spills 200 Litres or less	<ul style="list-style-type: none"> • Isolate immediate area at least 30 metres (100 feet), initially. • Wear recommended PPE. • Ensure area is well-ventilated. • Allow spilled fumigant to disperse/evaporate. • Ventilate area before allowing re-entry.
Methods for Cleaning Up Large Liquid Spills > 200 Litres	<ul style="list-style-type: none"> • Isolate at least 100 metres (300 feet) in all directions, initially. • Wear self-contained breathing apparatus (SCBA) and recommended PPE (see Section 8). • Ensure area is well-ventilated. • Allow spilled fumigant to disperse/evaporate. • Ventilate area before allowing re-entry.
Other Information	<ul style="list-style-type: none"> • For disposal, see Section 13.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

This product is a highly hazardous material and must be handled with care only by certified pesticide applicators or persons under their direct supervision who are trained with its proper use. IF THE INFORMATION IN THIS SDS DIFFERS FROM THAT ON THE END USE LABELING FOR THIS PRODUCT, THE HANDLER MUST FOLLOW THE PRECAUTIONARY STATEMENTS ON THE END USE LABELING.

- Obtain special instructions before use.
- Wear appropriate personal protective equipment (see Section 8).
- Handle in accordance with good industrial hygiene and safety practices.
- Valve protection caps must remain in place unless container is secured. Close valve after each use and when container is empty.
- Do not drop, drag, slide or roll cylinders on their sides. Do not subject cylinders to rough handling or to abnormal mechanical shock. Use a suitable hand truck or forklift to move heavier cylinders.
- Never insert an object (e.g. wrench, screwdriver, pry bar) into cap openings. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly.
- Do not heat container by any means to increase the discharge rate of product from the container. Use only dry nitrogen gas to pressurize cylinders. Polyethylene or Teflon® tubing may be used to transfer this product at low pressures. Regulator must be operated with a secondary pressure relief valve. DO NOT use high pressure hose connection between the nitrogen supplying cylinder and this product's cylinder.
- Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Take precautionary measures against static discharges.
- Do not breathe gas. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid prolonged exposure. Do not get this material on clothing.
- Use only outdoors or in a well-ventilated area.
- When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES

- Cylinders and containers should be tightly closed and stored in a cool, dry, well-ventilated area under lock and key (secured).
- Store upright in original container.
- Prevent electrostatic charge build-up by using common bonding and grounding techniques.
- Store out of direct sunlight at temperatures not exceeding 55°C (131°F).
- Store away from incompatible materials (see Section 10).
- Post as a pesticide storage area.
- Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS (OELs) FOR METHYL BROMIDE (CAS 74-83-9)

SOURCE OF EXPOSURE LIMIT for Methyl Bromide	TYPE	VALUE	
Safe Work Australia (SWA) Exposure Limits	TWA	5 ppm	19 mg/m ³
US ACGIH, Threshold Limit Values (TLVs)	TWA	1 ppm	3.9 mg/m ³
US NIOSH, Documentation for Immediately Dangerous to Life or Health	IDLH	250 ppm	970 mg/m ³

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week.

EXPOSURE GUIDELINES FOR METHYL BROMIDE (CAS 74-83-9)

Safe Work Australia (SWA):	Skin designation	Can be absorbed through the skin.
US ACGIH Threshold Limit Values:	Skin designation	Can be absorbed through the skin.

BIOLOGICAL MONITORING

The bromide concentration in urine is a suitable parameter for determining exposure to methyl bromide. However, there is currently no recognised biological occupational exposure limit (BOEL).

Recommended blood bromide BOEL is 12 mg/L (150 µmol/L) post shift. Review work practices and retest in 1 week (half-life of bromide in blood is 12 to 14 days).

CONTROL BANDING: Not assigned.

ENGINEERING CONTROLS

Equipment	Provide easy access to adequate water supply for eye flushing or skin decontamination in the work area. For field handling and application situations, refer to the pesticide end-use label for emergency water requirements.
Ventilation	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

INDIVIDUAL PROTECTION MEASURES

General Hygiene	<ul style="list-style-type: none"> Wash hands and face before breaks and immediately after handling product. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Keep working clothes separate.
Minimum Protection	When performing tasks with NO potential for liquid contact, handlers and applicators must wear: <ul style="list-style-type: none"> Long-sleeved shirt and long pants, and Shoes and socks
Eye and Face Protection	Full face shield or safety glasses with brow and temple shields. Do NOT wear goggles.
Skin Protection and Protective Material Types	<p>Hand protection: For formulators and non-end-use handlers and applicators, do not wear chemical-resistant gloves when handling this product unless performing tasks with potential for contact with liquid fumigant. Methyl bromide trapped inside gloves can cause skin injury.</p> <p>Other: Wear loose, long-sleeved shirts, long trousers and socks that are cleaned after each wearing. Do not wear jewelry or other gas-confining apparel.</p> <p>For clean-up, wear chemical resistant gloves, footwear, and clothing or coveralls such as Tychem or Saranex.</p> <ul style="list-style-type: none"> Incidental contact: < 10 minutes. Nitrile, butyl rubber or neoprene gloves are acceptable. More than incidental (Longer protection): > 10 minutes. Viton or Silver Shield ® gloves are recommended. <p>For pesticide end-use handlers (including applicators):</p> <p>When performing tasks with NO potential for contact with liquid fumigant:</p> <ul style="list-style-type: none"> Wear long-sleeved shirt, long pants, shoes and socks. Do not wear jewelry, goggles, tight clothing, chemical-resistant gloves, rubber protective clothing, or rubber boots when handling.

Skin Protection and Protective Material Types (continued)	<p>When performing tasks with potential for contact with liquid fumigant:</p> <ul style="list-style-type: none"> - Wear long-sleeved shirt, long pants, shoes and socks. - Wear chemical resistant gloves, apron, and footwear with socks, plus protective eyewear (do not wear goggles). <p>In all working situations, if liquid or vapour exposure occurs, remove gloves, apron and footwear as soon as possible and discard as appropriate.</p>
<p>Respiratory Protection</p> <p>NOTE: Only respirators meeting Australian standards may be used for Respiratory Protection</p>	<p>For non-handlers and non-applicators:</p> <ul style="list-style-type: none"> - If working in an environment where the eyes are stinging and watery due to exposure to this product, wear an approved full-facepiece respirator with an organic vapour cartridge. <p>For all pesticide handlers (including applicators):</p> <ul style="list-style-type: none"> - When an air-purifying respirator is required under the end-use label's General Fumigation section, handlers (including applicators) must wear an approved full-facepiece air-purifying respirator with either a Type MB or Type AX canister complying with AS 1716. <p>Emergency or planned entry into unknown concentrations or IDLH conditions:</p> <ul style="list-style-type: none"> - Any self-contained breathing apparatus that has a full-facepiece and is operated in a pressure-demand or other positive-pressure mode that complies with both AS 1715 and AS 1716. <p>Escape:</p> <ul style="list-style-type: none"> - Air-purifying respirator equipped with full-facepiece and an organic vapour cartridge. - Any air-purifying hood style CBRN escape-certified respirator. - Air-purifying respirator with canisters that include the escape gas mask (canister) respirator, the gas mask (canister) respirator, and the filter self-rescuer. - Any self-contained breathing apparatus with hood or full-facepiece mask. <p>Respirators certified "escape only" can only be used for escape purposes and CANNOT be used for responding to emergencies.</p>
Thermal Hazards	See Section 5 for specific fire/chemical PPE advice.

Relevant Australian Standards:

The following Australian Standards will provide general advice regarding safety clothing and personal protective equipment (PPE):

Respiratory equipment: AS/NZS 1715 and 1716. Protective Gloves: AS 2161. Occupational Protective Clothing: AS/NZS 4501 set 2008. Industrial Eye Protection: AS1336 and AS/NZS 1337. Occupational Protective Footwear: AS/NZS2210.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless gas
Odour	Odourless
Odour Threshold	No data available
pH	Not applicable
Boiling Point	3.6°C (38.5°F)
Boiling Range	Not available
Melting Point	Not applicable
Freezing Point	Not applicable
Evaporation Rate	Not applicable
Flash Point (°C)	Not applicable
Autoignition Temperature	No data available
Flammability (solid, gas)	Not ordinarily considered to be combustible; however, will burn in air in presence of a high energy source of ignition and within a narrow flammability range. (NFPA)
Flammability Limits in air, Upper % by volume	ca. 15%
Flammability Limits in air, Lower % by volume	ca. 10%
Vapour Pressure	1,866.5 hPa @ 20°C (68°F) 3,466.4 hPa @ 40°C (104°F)
Vapour Density	ca. 3.27 (air = 1)

Relative Density (g/cm ³) (Specific Gravity)	1.7 @ 0°C (32°F)
Density	13.99 lbs./gal @ 20°C (68°F)
Solubility(ies)	17.5 g/L in water
Particle Characteristics	Does not apply to this material because it is a gas
Partition Coefficient (n-octanol/water)	log (P _{ow}) = 1.19 (HSDB)
Decomposition Temperature	No data available
Viscosity of Product	Does not apply to this material because it is a gas

10. STABILITY AND REACTIVITY

Reactivity	No dangerous reactions known under conditions of normal use.
Chemical Stability	No decomposition if stored and applied as directed.
Possibility of Hazardous Reactions	Hazardous polymerisation does not occur.
Conditions to Avoid	None known.
Incompatible Materials	Aluminum, Zinc, Alkali metals, Strong bases
Hazardous Decomposition Products	Bromine, Carbon dioxide (CO ₂), Carbon monoxide, Hydrogen halides

11. TOXICOLOGICAL INFORMATION

Information on Possible Routes of Exposure	<ul style="list-style-type: none"> • Inhalation • Skin contact • Eye contact • Ingestion
Early Onset of Symptoms Related to Exposure	<p>Vapour Contact:</p> <ul style="list-style-type: none"> • Eye, skin, respiratory system irritation • Headache, dizziness, malaise, nausea, vomiting • Incoordination, hand tremor, blurred vision • Difficulty breathing, muscle weakness, convulsions <p>Liquid Contact:</p> <ul style="list-style-type: none"> • Frostbite

ANIMAL ACUTE TOXICOLOGY STUDIES

302 ppm (1170 mg/m ³)	Acute Inhalation LC ₅₀ Rat: 8 Hour for males with 95% confidence limit of 302 ppm (1170 mg/m ³)
650 - 900 ppm (2500 - 3500 mg/m ³)	Acute Inhalation LC ₀₋₁₀₀ Rat: 4 Hour (CMA Methyl Bromide Emergency Response Guide)
104 mg/kg 133 mg/kg	Acute Oral LD ₅₀ Rat, two GLP studies (1994)

Skin Corrosion/Irritation	Skin irritation, irritant contact dermatitis, hyperpigmentation
Serious Eye Damage/Irritation	Severe eye irritation.
Respiratory or Skin Sensitisation	Sufficient data not available.
Germ Cell Mutagenicity	Methyl bromide demonstrates genotoxicity in both in vivo and in vitro test at levels above the TLV. Suspected to be mutagenic.
Carcinogenicity	<p>International Agency for Research on Cancer (IARC): Group 3: Not classifiable as to its carcinogenicity to humans</p> <p>National Toxicology Program (NTP): Not listed</p> <p>American Conference of Governmental Industrial Hygienists (ACGIH): A4: Not classifiable as a human carcinogen</p>
Reproductive Toxicity	Not classified.

Specific Target Organ Toxicity (single exposure)	<ul style="list-style-type: none"> • Skin, Eyes, Respiratory System, Central Nervous System • Single exposure may cause respiratory tract irritation, pulmonary oedema.
Specific Target Organ Toxicity (repeated exposure)	Repeated-Dose Toxicity: Subchronic inhalation studies in mice, rats, and dogs established target organs of nervous system, lungs, liver, stomach, kidney, and heart with No Observed Effect Levels (NOELs) between 20 and 30 ppm.
Aspiration Hazard	No aspiration toxicity classification.
Delayed Health Effects from Exposure	<ul style="list-style-type: none"> • Methyl bromide is a poison and can cause respiratory distress, central nervous system effects, cardiac arrest. Pulmonary edema with late onset chemical pneumonitis can result from exposure to high concentrations. Death can occur from overexposure. • Overexposure may cause neurotoxic effects (peripheral neuropathy) from which recovery may be slow.
Chronic Effects	Causes damage to organs through prolonged or repeated exposure. May produce central nervous system effects such as mental confusion, lethargy, blurred vision, loss of coordination, and muscle weakness. Repeated skin exposure may cause irritant contact dermatitis.
Interactive Effects	No data available.
Other Information	None.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life.
Aquatic Toxicity	<ul style="list-style-type: none"> • Guppy: EC₅₀ = 0.0016 mg/L, 24 hour, Renewal • Rainbow Trout: EC₅₀ = 3.9 mg/L; 96 hour
Terrestrial Toxicity	Toxic to terrestrial vertebrates and invertebrates.
Persistence and Degradability	This substance is not considered to be persistent, bioaccumulative, or toxic (PBT).
Bioaccumulative Potential	Due to low log P _{ow} (<5.0) Methyl bromide is not expected to bioaccumulate. BCF = 3 (estimated).
Mobility in Soil	High mobility expected based upon K _{oc} values ranging from 9 to 22.
Other Adverse Effects	Harms public health and the environment by destroying ozone in the upper atmosphere.
Partition Coefficient (n-octanol/water)	log (P _{ow}) = 1.19 (HSDB)
Other Adverse Effects	Methyl Bromide is listed as Class I ozone depleting substance, which can allow increased ultraviolet radiation to reach the earth's surface.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Cylinder Management	<ul style="list-style-type: none"> • Cylinders should be returned according to instructions on the cylinder. • Close the valve when the cylinder is empty and install the safety cap(s) and bonnet. • Do not ship cylinders without safety caps or valve protection bonnets. • When a cylinder is partially full and there is no further requirement for the product, contact the distributor for return instructions.
Safe Handling	<ul style="list-style-type: none"> • Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a national discharge permit/license. • Do not discharge effluent containing this product to sewer systems.
Refillable Container	<ul style="list-style-type: none"> • Only the registrant or distributor is allowed to refill pesticide into containers. Do not reuse this container for any other purpose.
Disposal of Product	<ul style="list-style-type: none"> • Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. • If these wastes cannot be disposed of by use according to label instructions, contact your State EPA or the product manufacturer or distributor for guidance.
Container Disposal	<ul style="list-style-type: none"> • Containers are the property of the registrant or distributor and must be returned promptly after use for refilling or for disposal.

14. TRANSPORT INFORMATION

AUSTRALIA ADG, IMDG, US DOT, ADR

UN Number	UN1062
Proper Shipping Name	Methyl Bromide
Transport Hazard Class(es)	2.3
Packing Group Number	Not applicable
Toxic-Inhalation Hazard	Yes
Hazard Zone (USA)	C
Environmental Hazards	Not listed
Marine Pollutant	Not listed
Hazardous Substance	Reportable Quantity (RQ) is 1,000 lbs in the USA
Labels/Placards	ADG: Class 2.3, Toxic Gas US DOT: Class 2.3, Poison Gas IMDG, ADR, United Nations: Class 2.3, Toxic Gas
Air Transport (IATA/ICAO)	Forbidden for any amount
Hazchem Code	2X 2 denotes: Fine water spray X denotes: Full fire kit and breathing apparatus
Hazard Identification Number (HIN)	26 2 denotes: Gas 6 denotes: Very toxic
Emergency Response Guide (USA)	123 (NAERG – North American Emergency Response Guide)
IMDG EmS	F-C Non-Flammable Gases S-U Spillage Schedule: Gases (Flammable, Toxic, or Corrosive)
Special Precautions	Packages must be secured against all movement during transport. Keep markings, labels or placards on package until cleaned and purged of residue including bulk and non-bulk packages. For cylinders, ensure valve is closed and safety cap(s) and valve protection are in place prior to transport.

15. REGULATORY INFORMATION

INTERNATIONAL AGREEMENTS

Montreal Protocol on Substances that Deplete the Ozone Layer (Ozone Depleting Substances):
Methyl Bromide is listed.

International Plant Protection Convention:
Manual for International Standards for Phytosanitary Measures (ISPM) - ISPM 15 Fumigation Treatments includes Methyl Bromide.

Stockholm Convention on Persistent Organic Pollutants:
Methyl Bromide is not listed.

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade:
Methyl Bromide is not listed in Annex III.

AUSTRALIAN REGULATIONS

Australian Inventory of Chemical Substances (AICS):
Methyl Bromide is listed as an industrial chemical.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):
Methyl Bromide is listed in Schedule 7 and Appendix J, Part 2 (see Note):
Note: All poisons included in Appendix J, Part 2 are not to be available except to authorised or licensed persons.

Ozone Protection and Synthetic Greenhouse Gas Management Act 1989:
Methyl Bromide is listed.

16. OTHER INFORMATION

This SDS prepared in accordance with SWA Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals, July 2020, amended to reflect GHS 7.

Version 2 Date December 02, 2022

Revision History:

30/01/2022 Initial Version

02/12/2022 Updated formatting to reflect the adoption of the 7th revised edition of the GHS Section 13: Added ozone depletion information in Other Adverse Effects header

ABBREVIATIONS:

ACGIH	American Conference of Governmental Industrial Hygienists
ADG	Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
ADR	European Agreement concerning the Internal Carriage of Dangerous Goods by Road
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service
CBRN	Chemical, Biological, Radiological, and Nuclear
CHEMTREC	Chemical Transportation Emergency Center
CMA	Chemical Manufacturer's Association, renamed to American Chemistry Council
EC ₅₀	Half Maximal Effective Concentration - concentration of a material in water, a single dose which is expected to cause a biological effect on 50% of a group of test species
GLP	Good Laboratory Practices - a system where non-clinical health and safety studies are carried out, planned, monitored, recorded, archived and reported to ensure consistent, quality results
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSDB	Hazardous Substances Database
IDLH	Immediately Dangerous to Life and Health - the maximum airborne concentration from which one could escape [within 30 minutes] without any escape-impairing symptoms or any irreversible health effects
IMDG	International Maritime Dangerous Goods
K _{oc}	Measures the mobility of a substance in soil. A very high value means it is strongly adsorbed onto soil and organic matter and does not move throughout the soil. A very low value means it is highly mobile in soil.
LC ₅₀	Lethal Concentration - median dose at which 50% of test animals die from inhalation
LD ₅₀	Lethal Dose - median dose at which 50% test animals die from oral or dermal exposure
log (P _{ow})	The ratio of a chemical's concentration in the octanol phase to its concentration in the aqueous phase of a two-phase octanol/water system
NFPA	National Fire Protection Association (USA)
NIOSH	National Institute of Occupational Safety and Health (USA)
NOEL	No Observed Effect Level
ppm	part(s) per million
PPE	Personal Protective Equipment
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia, formerly ASCC and NOHSC
TLV	Threshold Limit Value
TWA	Time Weighted Average - airborne concentration for a worker in an 8-hour day
UN	United Nations
US DOT	United States Department of Transportation

Key Literature References and Sources of Data:

- AICS - Australian Inventory of Chemical Substances
- National Library of Medicine - PubChem - Hazardous Substance Data Base
- Verisk 3E database
- ECHA (European Chemical Agency) - Information on Chemicals database
- Manufacturer SDS

WARRANTY

Notice: The information above is believed to be accurate and represents the best information currently available to us. Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.