



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Address:

5301 Keystone Ct,
Rolling Meadows, IL 60008

Tel: 1-847-253-8868

Fax: 1-847-253-8877

Product Name: 1-Bromopropane, 99.5%

Catalog Numbers: FC006

CAS No: 106-94-5

Emergency: (CHEMTREC) 800-424-9300

Revision Date: April 8, 2013

Synonyms: n-propyl bromide, propyl bromide

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt. %
1-Bromopropane	106-94-5	99.5

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview:

Potential Health Effects:

Primary Entry Routes: May cause central nervous system depression, liver and kidney damage, blood abnormalities, severe eye and skin irritation with possible burns. Causes respiratory tract irritation and possible burns. May cause adverse reproductive effects based upon animal studies.

Target Organs: Kidneys, central nervous system, liver, bone marrow.

Eye: Causes eye irritation and possible burns.

Skin: Causes skin irritation and possible burns.

Ingestion: May cause irritation of the digestive tract.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause liver and kidney damage. Vapors may cause dizziness or suffocation. Exposure may cause bone marrow changes, blood abnormalities, and respiratory tract irritation with possible burns.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. There are not enough human data on 1-bromopropane to determine whether the chemical has harmed human reproduction and development. However, research on lab rats shows 1-bromopropane can damage reproduction and development in animal. Effects such as a lengthened estrous (reproductive) cycle occurred when female rats inhaled 1-bromopropane at concentrations of 250 ppm.

SECTION 4 – FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cup of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is not difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: 25 °C (77.00 °F) LEL: 4.60 vol%

Autoignition Temperature: 490 °C (914.00 °F) UEL: 7.8 vol%

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective. DO NOT get water inside containers. Do NOT use straight streams of water.

Fire-Fighting Instructions: Vapors may form an explosive mixture with air. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. May polymerize explosively when involved in a fire. Vapors can spread along the ground and collect in low or confined areas.

Fire-Fighting Equipment: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NOISH (approved or equivalent), and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills / Leak Procedures: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

SECTION 7 – HANDLING AND STORAGE

Handling Precautions: Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty



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containers retain product residue,(liquid and/or vapor),and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

SECTION 8 –EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	EPA (recommended)
1-Bromopropane	Not listed	10 ppm, 50 mg/m ³ TWA	25 ppm, TWA
Ventilation Requirements:	Use adequate mechanical or local exhaust ventilation to keep vapor and mist levels as low as possible.		
Respiratory Protection:	At high levels of concentration, use self-contained breathing apparatus.		
Eye/Face:	Splash-proof chemical safety goggles or face shield. Contact lenses should not be worn when working with this material.		
Protective Gloves:	Gloves impervious to chemicals. Viton & Norfoil recommended. Do not use natural rubber gloves.		
Protective Clothing:	Clean body-covering, apron and boots not made of natural rubber.		
Work/Hygienic Practices:	Eliminate body contact with this chemical. Do not eat, drink or smoke until after work washing.		
Special/Other:	Provide a safety eye bath at work area. Provide a safety shower.		

Personal Protective Equipment

Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Respirators:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always uses a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Solubility: 2.5 g/l
Appearance: clear, colorless	Vapor Pressure: 146 mmHg (20 °C)
Odor: None reported.	Vapor Density: 4.34(air=1)
pH: Not available	Specific Gravity/Density: 1.35 g/cm ³
Evaporation Rate: Not available.	Decomposition Temperature: Not available.
Boiling Point: 71 °C (at 760 mm Hg)	Molecular Formula: C ₃ H ₇ Br
Freezing/Melting Point: -110 °C	Molecular Weight: 122.99
Viscosity: Not available.	

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Ignition sources, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, hydrogen bromide.
Hazardous Polymerization: Has not been reported.

SECTION 11 – TOXICOLOGICAL INFORMATION

RTECS#:
TX110000
LD50/LC50:
Inhalation: rat, LC 50 =253 gm/m³/30M;<BR.
Carcinogenicity:
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology: Experimental reproductive effects have been reported.
Teratogenicity: No information available.
Reproductive Effective: See actual entry in RTECS for complete information.
Neurotoxicity: No information available.
Mutagenicity: No information available.
Other Studies: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Dispose of in accordance with Local, State and Federal regulations. Do not flush to sanitary sewer or waterway. Refer to RCRA regulations 40 CFR 260-281 for waste disposal instructions.

SECTION 14 – TRANSPORT INFORMATION

Hazardous Materials Descriptions and Proper Shipping Names
(Vapor degreasing solvent, halogenated hydrocarbon mixture, n.o.s.)
Hazard Class - Non-flammable liquid
Packing Group - III
Label(s) Required - None
Quantity Limitations- Not Regulated
Classification number – 149980-2



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Marine and Air Transportation

SECTION 15 – REGULATORY INFORMATION

US FEDERAL

TSCA

CAS#106-94-5 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals are listed under a Chemical Test Rules.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS#106-94-5: acute, chronic, flammable.

Section 313

No chemicals are reported under Section 313.

Clean Air act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

NFPA, HMIS, WHMIS:

Health 1

Flammability 1

Reactivity 0

Personal Protection H

California Proposition 65: This product contains n-propyl bromide which is known to the state of California to cause reproductive toxicity.

SECTION 16 – OTHER INFORMATION

STATE

CAS#106-94-5 can be found on the following state right to know lists: Pennsylvania, Massachusetts.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols

XN

Risk Phases:

R 10 Flammable.

R 20 Harmful by inhalation.

Safety Phrases:

S 24 Avoid contact with skin.

S 9 Keep container in a well-ventilated place.

WGK (Water Danger /Protection)

CAS#106-94-5: No information available.

Canada –DSL/NDSL

CAS#106-94-5 is listed on Canada's DSL List.

Canada-WHMIS

This product has a WHMIS classification of D2B, B2.

Canadian Ingredient Disclosure List

Exposure Limits

MSDS Creation Date: 11/12/1998

Revision #2 Date: 3/26/2002