



MATERIAL SAFETY DATA SHEET

1,3-DIBROMOPROPANE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:

1,3-Dibromopropane, 98%

Catalog Numbers:

AC155040000, AC155040050, AC155040500, AC155041000, AC155045000

Synonyms:

Trimethylene Bromide; Alpha, Gamma-Dibromopropane; Omega, Omega'-Dibromopropane; Trimethylene Dibromide.

Company Information:

LEONID CHEMICALS

62/A-2 1st Stage, Yeshwanthpur Industrial Suburb

Ashokpuram School Road

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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	109-64-8
Chemical Name	:	1,3-Dibromopropane
%	:	98 %
EINECS#	:	203-690-3
Hazard Symbols	:	Un Listed
Risk Phrases	:	Un Listed

SECTION 3- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance: clear yellow clear liquid. Flash Point: 54 deg C.

Warning! Causes respiratory tract irritation. Flammable liquid and vapor. Causes eye and skin irritation. May cause digestive tract irritation. May cause central nervous system depression.

Target Organs:

Central nervous system.

Potential Health Effects

Eye:

Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin:

Causes skin irritation. May cause cyanosis of the extremities.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

Inhalation:

Causes respiratory tract irritation. Vapors may cause dizziness or suffocation. Can produce delayed pulmonary edema. May cause burning sensation in the chest.

Chronic:

Narcotic in high concentrations

SECTION 4- FIRST AID MEASURES

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

SECTION 5- FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor.

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. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Flash Point:

54 deg C (129.20 deg F)

Autoignition Temperature:

Not applicable.

Explosion Limits, Lower:

Not available.

Upper:

Not available.

NFPA Rating:

(estimated) Health: 2; Flammability: 2; Instability: 0

SECTION 6- ACCIDENTAL RELEASE MEASURES

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

SECTION 7 - HANDLING and STORAGE

Handling:

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

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits :

Chemical Name	:	1,3-Dibromopropane
ACGIH	:	none listed
NIOSH	:	none listed
OSHA - Final PELs	:	none listed

OSHA Vacated PELs:

1,3-Dibromopropane: No OSHA Vacated PELs are listed for this chemical.

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:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Clear liquid
Appearance	:	clear yellow
Odor	:	None reported.
pH	:	Not available.
Vapor Pressure	:	4 hPa @ 25 C
Vapor Density	:	7.0
Evaporation Rate	:	Not available.
Viscosity	:	Not available.
Boiling Point	:	167 deg C @ 760.00mmHg
Freezing/Melting Point	:	-34 deg C
Decomposition Temperature	:	Not available.
Solubility	:	1.7 g/l (30 c)
Specific Gravity/Density	:	1.9890g/cm3
Molecular Formula	:	C3H6Br2
Molecular Weight	:	201.89

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, hydrogen bromide, bromine fumes.

Polymerization:

Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 109-64-8: Tx8575000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 109-64-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology	:	No information available.
Teratogenicity	:	No information available
Reproductive Effects:	:	No information available
Mutagenicity	:	Mutations in microorganisms: Salmonella typhimurium = 10 umol/plate. Microsomal Mutagenicity Assay: Salmonella typhimurium 10 umol/plate.
Neurotoxicity	:	No information available

Other Studies:

Un Listed

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

No data available. No information available.

Environmental : No data available.
Physical : No data available.
Other : None.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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RCRAP-Series : None listed.
RCRA U-Series : None listed.

SECTION 14 - TRANSPORT INFORMATION

US DOT

Shipping Name : FLAMMABLE LIQUIDS, N.O.S.
Hazard Class : 3
UN Number : Un1993
Packing Group : III

Canada TDG

Shipping Name : No information available.
Hazard Class :
UN Number :
Packing Group :

SECTION 15 - REGULATORY INFORMATION

US FEDERAL

TSCA

CAS# 109-64-8 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 in this product are under a Chemical Test Rule.

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.

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 # 109-64-8: acute, flammable

Section 313:
No chemicals are reportable 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.

STATE:
CAS# 109-64-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
XI

Risk Phrases:
R 10 Flammable.
R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 109-64-8: No information available.

Canada - DSL/NDSL:
CAS# 109-64-8 is listed on Canada's DSL List.

Canada WHMIS:
This product has a WHMIS classification of B3, D2B.

Canadian Ingredient Disclosure List:
Un Listed

SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher 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 Fisher has been advised of the possibility of such damages.

