



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Isopropyl Bromide
Cat No.: AC107320000; AC107320010; AC107320025; AC107320100;
AC107322500
CAS No. : 75-26-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended uses : Laboratory chemicals
Uses advised against: Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company : Krishna Solvechem Limited.
B/503, Sahayog, S. V. Road,
Kandivali (West), Mumbai – 400067. India.
Telephone : +91-22-6123 0222
Email : exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	(Category 2)
Reproductive Toxicity	(Category 1A)
Specific target organ toxicity(Single exposure)	(Category 3)
Target organs – Respiratory system, Central nervous system	
Specific target organ toxicity (repeated exposure)	(Category 2)
Target organs – Liver, blood	

2.2 Label elements

Pictogram :



Signal word

Danger

Hazard statement (s)

Highly flammable liquid and vapor



Precautionary statement (s)

May cause drowsiness or dizziness
May damage fertility
May cause damage to organs through prolonged or repeated exposure
May cause respiratory irritation

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Inhalation :

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN (or hair):

IF ON SKIN : Take off immediately all contaminated clothing. Rinse skin with water/shower

Response:

IF EXPOSED OR CONCERNED :Get medical attention/advice.

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage:

Store locked up Store in a well-ventilated place.
Keep container tightly closed



	<p>Disposal: Dispose of contents/container to an approved waste disposal plant</p>
<p>Hazards not otherwise classified (HNOC)</p>	<p>WARNING. Reproductive Harm.</p>

SECTION 3: Composition / information on ingredients

3.1

Component	CAS-No	Weight %
2-Bromopropane	75-26-3	>95

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice:	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
If inhalation :	Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.
In case of skin contact :	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion :	Do NOT induce vomiting. Call a physician or poison control center immediately.
4.2 Most important symptoms and effects :	Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
4.3 Notes to Physician :	Treat symptomatically

SECTION 5: Firefigh effects

5.1 Extinguishing media



	Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.								
	Unsuitable Extinguishing Media	No information available								
5.2	Flash Point :	1 °C / 33.8 °F								
	Method :	No information available								
	Autoignition Temperature:	No information available								
	Explosion Limits:									
	Upper	No data available								
	Lower	4.6 vol %								
	Sensitivity to Mechanical Impact	No information available								
	Sensitivity to Static Discharge	No information available								
	Specific Hazards Arising from the Chemical :	Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.								
	Hazardous Combustion Products :	Carbon monoxide (CO). Carbon dioxide (CO ₂).								
5.4	Protective Equipment and Precautions for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.								
	NFPA:	<table border="1"> <thead> <tr> <th>Health</th> <th>Flammability</th> <th>Instability</th> <th>Physical hazards</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>0</td> <td>N/A</td> </tr> </tbody> </table>	Health	Flammability	Instability	Physical hazards	2	3	0	N/A
Health	Flammability	Instability	Physical hazards							
2	3	0	N/A							

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges

6.2 Environmental precautions

Should not be released into the environment. See section 12 for additional Ecological Information.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.



SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek

7.2 Conditions for safe storage

Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. Incompatible materials. Strong oxidizing agents. Strong bases.

SECTION 8: Exposure controls/personal protection

8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use only under a chemical fume hood.

8.2 Exposure controls

Personal protective equipment -

Eye / Face protection

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 protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice..



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Liquid, colorless light brown
b) Odour	odorless
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	-89 °C / -128.2 °F
f) Initial boiling point and boiling range	59 °C / 138.2 °F @ 760 mmHg
g) Flash point	1 °C / 33.8 °F
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Upper: No data available Lower: 4.6 vol %
k) Vapour pressure	224 mbar @ 20 °C
l) Vapour density	No information available
m) Specific Gravity	1.310
n) Solubility	No information available
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	No information available
q) Decomposition temperature	251 °C.
r) Viscosity	No information available
s) Molecular formula	C ₃ H ₇ Br
t) Molecular Weight	122.99



SECTION 10: Stability and Reactivity

10.1 Reactive Hazard :	None known, based on information available
10.2 Chemical stability :	Stable under normal conditions.
10.3 Possibility of hazardous reactions :	None under normal processing.
10.4 Conditions to avoid :	Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Incompatible products.
10.5 Incompatible materials:	Strong oxidizing agents, Strong bases
10.6 Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO ₂)
10.7 Hazardous Polymerization	Hazardous polymerization does not occur

SECTION 11: Toxicological information

11.1

Information on toxicological effects

Acute toxicity:

Product Information: No acute toxicity information is available for this product

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Bromopropane	LD50 > 2000 mg/kg (Rat)	Not listed	LC50 9923 - 29440 ppm (Rat) 6 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation : irritating to eyes, respiratory system and skin

Sensitization: No information available

Carcinogenicity : Possible cancer hazard. May cause cancer based on animal data.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
2-Bromopropane	75-26-3	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: No information available.

Reproductive Effects: Experiments have shown reproductive toxicity effects on laboratory animals. May impair fertility.



Developmental Effects :	component substance is listed on California Proposition 65 as a developmental hazard.
Teratogenicity:	No information available.
STOT - single exposure :	Respiratory system, Central nervous system(CNS)
STOT - repeated exposure:	Liver, Blood
Aspiration hazard :	No information available.
Symptoms / effects,both acute and delayed:	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
Endocrine Disruptor Information :	No information available
Other Adverse Effects :	The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1

Ecotoxicity:

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
2-Bromopropane	Not listed	LC50 24h 150 mg/L (goldfish)	Not listed	Not listed

12.2 Persistence and degradability:

Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation

No information available

12.3 Mobility:

Will likely be mobile in the environment due to its volatility.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

14.1 UN number :

DOT: UN2344 TDG: UN2344
IATA: UN2344 IMDG: UN2344

14.2 UN proper shipping name

DOT : BROMOPROPANES

IMDG : BROMOPROPANES



IATA :	BROMOPROPANES			
TDG :	BROMOPROPANES			
14.3 Transport hazard class(es)	DOT: 3	TDG: 3	IMDG: 3	IATA: 3
14.4 Packaging group:	DOT: II	TDG: II	IMDG: II	IATA: II

SECTION 15: Regulatory information

15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
2-Bromopropane	75-26-3	X	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories:

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
2-Bromopropane	75-26-3	-	X	200-855-1	X	X	X	X	KE-03708



U.S. Federal Regulations

SARA 313 Not applicable
SARA 311/312 Hazard Categories See section 2 for more information
CWA (Clean Water Act) Not applicable
Clean Air Act Not applicable
OSHA - Occupational Safety and Health Administration Not applicable
CERCLA Not applicable
California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
2-Bromopropane	75-26-3	Female Reproductive Male Reproductive	-	Developmental

15.2 U.S. State Right-to-Know Regulations:

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2-Bromopropane	-	X	-	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security - This product does not contain the any DHS Chemicals.

Other International Regulations

Mexico – Grade No information available

Authorization/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
2-Bromopropane	-	Use restricted. See item 30. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-



Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
2-Bromopropane	75-26-3	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2-Bromopropane	75-26-3	Not applicable	Not applicable	Not applicable	Annex I - Y45

SECTION 16: Other information

16.1 Prepared By: Regulatory affairs
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Revision Summary: This document has been updated to comply with the US OSHA Haz Com 2012 Standard replacing the current legislation under 29 C FR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

16.2 Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.