Page 1/9 Creation Date 16-Sep-2021 Revision Date 22-Jan-2023 Version 3

## 2-Bromopropane

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品描述: Product Description:	2-溴丙烷, 99% 2-Bromopropane
Cat No. : Synonyms CAS-No Molecular Formula Supplier	Isopropyl bromide 75-26-3 C3 H7 Br Dakings Chemical (Shandong) Co.,Ltd Moscow Road, Qingdao Qianwan Bonded Port Area, Shandong Pilot Free Trade Zone , China TEL: +8617685872921
Emergency Telephone Number	Call CHEMTREC 24 at TEL: +8617685872921
E-mail address	sales@dakingschem.com

Recommended Use Uses advised against

Laboratory chemicals. No Information available

### **SECTION 2. HAZARD IDENTIFICATION**

Physical State Liquid **Appearance** Colorless, Light brown Odor Odorless

**Emergency Overview** 

Highly flammable liquid and vapor. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Repeated exposure may cause skin dryness or cracking.

Classification of the substance or mixture

Flammable liquids.	Category 2
Reproductive Toxicity	Category 1A
Specific target organ toxicity - (repeated exposure)	Category 2

Label Elements

2-Bromopropane



### Signal Word

Danger

### **Hazard Statements**

H225 - Highly flammable liquid and vapor

H360F - May damage fertility

H373 - May cause damage to organs through prolonged or repeated exposure

### **Precautionary Statements**

### Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical/ ventilating/ lighting equipment
- P242 Use non-sparking tools

P243 - Take precautionary measures against static discharge

- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P271 Use only outdoors or in a well-ventilated area

P281 - Use personal protective equipment as required

#### Response

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

### **Physical and Chemical Hazards**

Vapors may cause flash fire or explosion. Highly flammable.

#### Health Hazards

May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

### Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its volatility. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

### SECTION 4. FIRST AID MEASURES

### **General Advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

\_\_\_\_\_

### 2-Bromopropane

### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

### 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.

### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

### Most important symptoms and effects

Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

### Self-Protection of the First Aider

Remove all sources of ignition.

### Notes to Physician

Treat symptomatically. Symptoms may be delayed.

### SECTION 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

### Extinguishing media which must not be used for safety reasons

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.

### **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. Thermal decomposition can lead to release of irritating gases and vapors.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

### **Personal Precautions**

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.

### **Environmental Precautions**

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

### Methods for Containment and Clean 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.

Refer to protective measures listed in Sections 8 and 13.

### SECTION 7. HANDLING AND STORAGE

### 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

2-Bromopropane

and explosion-proof equipment. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame.

### Specific Use(s)

Use in laboratories

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

#### **Exposure Controls**

### **Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

### Personal protective equipment

Eve Protection	Goggles	(European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Viton (R)	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> low boiling organic solvent Type AX Brown conforming to EN371
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

2-Bromopropane

	<b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted
Hygiene Measures	When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.
Environmental exposure controls	No information available.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	Colorless, Light brown Liquid	
Odor	Odorless	
Odor Threshold	No data available	
pH	No information available	
Melting Point/Range	-89 °C / -128.2 °F	
Softening Point	No data available	
Boiling Point/Range	59 °C / 138.2 °F	@ 760 mmHg
Flash Point Evaporation Rate	1 °C / 33.8 °F No data available	Method - No information available
Flammability (solid,gas)	Not applicable	l invited
Explosion Limits	Lower 4.6 Vol%	Liquid
	Lower 4.0 VOI/8	
Vapor Pressure	224 mbar @ 20 °C	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	1.310	
Bulk Density	Not applicable	Liquid
Water Solubility	0.3g/100ml	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/wate		
Component	log Pow	
2-Bromopropane	1.9	
Autoignition Temperature	No data available	
Decomposition Temperature	251 °C	
Viscosity Explosive Properties	No data available	Vapors may form explosive mixtures with air
	No information available	vapors may form explosive mixtures with an
Oxidizing Properties		
Molecular Formula	C3 H7 Br	
Molecular Veight	122.99	
molocular weight	122.33	

### SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	None under normal processing. Hazardous polymerization does not occur.
Conditions to Avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

### SECTION 11. TOXICOLOGICAL INFORMATION

\_\_\_\_

### 2-Bromopropane

\_\_\_\_\_

**Product Information** 

(a) acute toxicity;

\_\_\_\_\_

No acute toxicity information is available for this product

	1	I	
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Bromopropane	LD50 > 2000 mg/kg (Rat)		
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
	Possible cancer hazard. May	cause cancer based on animal	data
(g) reproductive toxicity; Reproductive Effects Developmental Effects	fertility.	oductive toxicity effects on labo d on California Proposition 65 a	
(h) STOT-single exposure;	No data available		
(i) STOT-repeated exposure; Target Organs	Category 2 Central nervous system (CNS)	), Blood, Liver.	
(j) aspiration hazard;	No data available		
Symptoms / effects,both acute and delayed	Inhalation of high vapor conce tiredness, nausea and vomitin		s like headache, dizziness,

SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity effects**

Do not empty into drains. .

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
2-Bromopropane	LC50 24h 150 mg/L (goldfish)			

### Persistence and Degradability

Persistence

Persistence is unlikely, based on information available.

**Bioaccumulative Potential** 

Bioaccumulation	is unlikely
-----------------	-------------

Component	log Pow	Bioconcentration factor (BCF)
2-Bromopropane	1.9	No data available

\_\_\_\_\_

\_\_\_\_\_

### 2-Bromopropane

\_\_\_\_\_

Mobility in soil	The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility Disperses rapidly in air
Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance
	SECTION 13. DISPOSAL CONSIDERATIONS
Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations.
	SECTION 14. TRANSPORT INFORMATION

### Road and Rail Transport

UN-No	UN2344
Proper Shipping Name	BROMOPROPANES
Technical Shipping Name	(2-Bromopropane)
Hazard Class	3
Packing Group	II
IMDG/IMO	
UN-No	UN2344
Proper Shipping Name	BROMOPROPANES
Technical Shipping Name	(2-Bromopropane)
Hazard Class	3
Packing Group	II
IATA	
UN-No	UN2344
Proper Shipping Name	BROMOPROPANES
Technical Shipping Name	(2-Bromopropane)
Hazard Class	3

II

Special Precautions for User

Packing Group

No special precautions required

### **SECTION 15. REGULATORY INFORMATION**

### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Australia (AICS), Korea (ECL).

Component	The	List of	Taiwan	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	AICS	KECL
	Inventory of	dangero	Toxic								
	Hazardous	us	Chemica								

2-Bromopropane

	Chemicals (2015 Edition)	-	l Substan ces Inventor y								
2-Bromopropane	X	-	X	Х	200-855- 1	Х	-	Х	X	X	KE-0370 8

### **National Regulations**

### **SECTION 16. OTHER INFORMATION**

Prepared By	Health, Safety and Environmental Department
Creation Date	16-Sep-2021
Revision Date Revision Summary	22-Jan-2023 SDS authoring systems update, replaces ChemGes SDS No. 75-26-3/1.

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers. Chemical incident response training.

### Legend

<ul> <li>CAS - Chemical Abstracts Service</li> <li>EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances</li> <li>PICCS - Philippines Inventory of Chemicals and Chemical Substances</li> <li>IECSC - Chinese Inventory of Existing Chemical Substances</li> <li>KECL - Korean Existing and Evaluated Chemical Substances</li> </ul>	<ul> <li>TSCA - United States Toxic Substances Control Act Section 8(b) Inventory</li> <li>DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List</li> <li>ENCS - Japanese Existing and New Chemical Substances</li> <li>AICS - Australian Inventory of Chemical Substances</li> <li>NZIOC - New Zealand Inventory of Chemicals</li> </ul>
<ul> <li>WEL - Workplace Exposure Limit</li> <li>ACGIH - American Conference of Governmental Industrial Hygienists</li> <li>DNEL - Derived No Effect Level</li> <li>RPE - Respiratory Protective Equipment</li> <li>LC50 - Lethal Concentration 50%</li> <li>NOEC - No Observed Effect Concentration</li> <li>PBT - Persistent, Bioaccumulative, Toxic</li> </ul>	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>Predicted No Effect Concentration (PNEC)</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
<ul> <li>ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road</li> <li>IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code</li> <li>OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor</li> </ul>	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC (volatile organic compound)

### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

2-Bromopropane

date of its publication. The information given is designed only as a 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

End of Safety Data Sheet