

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**Product Identifier**

Perihal Produk: **2-Bromopropionyl chloride**  
 Product Description: **2-Bromopropionyl chloride**  
 Cat No. : B23662  
 CAS No 7148-74-5  
 Molecular Formula C<sub>3</sub> H<sub>4</sub> Br Cl O

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

Recommended Use Laboratory chemicals.  
 Uses advised against No Information available

**Company**

Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd  
 Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square,  
 No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,  
 Selangor Darul Ehsan, Malaysia.  
 Main line: +60 3-5525 7888

**Supplier**

E-mail address Enquiry.my@thermofisher.com

**Emergency Telephone Number**

Tel: +03-5525 7888  
 CHEMTREC Malaysia **1-800-815-308** (Malay)  
 CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

**SECTION 2: HAZARDS IDENTIFICATION**
**Classification of the substance or mixture**

Flammable liquids	Category 3 (H226)
Skin Corrosion/Irritation	Category 1 B (H314)
Serious Eye Damage/Eye Irritation	Category 1 (H318)

**Label Elements**


Signal Word

Danger

Hazard Statements

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

H226 - Flammable liquid and vapor  
H314 - Causes severe skin burns and eye damage

## Precautionary Statements

### Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P233 - Keep container tightly closed  
P240 - Ground and bond container and receiving equipment  
P242 - Use non-sparking tools  
P241 - Use explosion-proof electrical/ ventilating/ lighting equipment  
P243 - Take action to prevent static discharges  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P264 - Wash face, hands and any exposed skin thoroughly after handling

### Response

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
P310 - Immediately call a POISON CENTER or doctor  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish  
P362 + P364 - Take off contaminated clothing and wash it before reuse

### Storage

P403 + P235 - Store in a well-ventilated place. Keep cool

### Disposal

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

## Other Hazards

Lachrymator (substance which increases the flow of tears)  
This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2-Bromopropionyl chloride	7148-74-5	<=100

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

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

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

#### Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### Most important symptoms and effects, both acute and delayed

ALFAAB23662

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

Difficulty in breathing. Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

## Indication of any immediate medical attention and special treatment needed

### **Notes to Physician**

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Do not use a solid water stream as it may scatter and spread fire.

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

No information available.

### Special hazards arising from the substance or mixture

Flammable.

### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen halides, Phosgene, Hydrogen chloride gas.

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation.

### Environmental precautions

See Section 12 for additional Ecological Information.

### Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe dust. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools.

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

## Conditions for Safe Storage, Including any Incompatibilities

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

## Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

### Exposure Controls

#### Engineering Measures

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

#### Eye Protection

Goggles

#### Hand Protection

Protective gloves

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

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.

#### 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  
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly  
When RPE is used a face piece Fit Test should be conducted

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

### Environmental exposure controls

No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

#### Appearance

Yellow

#### Physical State

Liquid

#### Odor

No information available

#### Odor Threshold

No data available

#### pH

No information available

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

Melting Point/Range	No data available	
Softening Point	No data available	
Boiling Point/Range	131 - 133 °C / 267.8 - 271.4 °F	@ 760 mmHg
Flash Point	51 °C / 123.8 °F	<b>Method</b> - No information available

Evaporation Rate	No data available
Flammability (solid,gas)	No information available
Explosion Limits	No data available

Vapor Pressure	No data available	
Vapor Density	No data available	(Air = 1.0)
Specific Gravity / Density	1.700	
Bulk Density	No data available	
Water Solubility	REACTS	
Solubility in other solvents	No information available	

## Partition Coefficient (n-octanol/water)

Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

Molecular Formula	C3 H4 Br Cl O
Molecular Weight	171.42

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None known, based on information available.

### Chemical Stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

Hazardous Polymerization	No information available.
Hazardous Reactions	No information available.

### Conditions to Avoid

Incompatible products. Exposure to moist air or water.

### Incompatible Materials

Strong bases. Alcohols.

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

## Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen halides. Phosgene. Hydrogen chloride gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

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

**(a) acute toxicity;**

**Oral**

No data available

**Dermal**

No data available

**Inhalation**

No data available

**(b) skin corrosion/irritation;**

No data available

**(c) serious eye damage/irritation;**

No data available

**(d) respiratory or skin sensitization;**

**Respiratory**

No data available

**Skin**

No data available

**(e) germ cell mutagenicity;**

No data available

**(f) carcinogenicity;**

No data available

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;**

No data available

**(h) STOT-single exposure;**

No data available

**(i) STOT-repeated exposure;**

No data available

**Target Organs**

No information available.

**(j) aspiration hazard;**

No data available

**Symptoms / effects, both acute and delayed**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Endocrine Disrupting Properties**

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

<u>Ecotoxicity effects</u>	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
<u>Persistence and degradability</u>	No information available
<u>Bioaccumulative potential</u>	No information available
<u>Mobility in soil</u>	No information available.
<u>Endocrine Disruptor Information</u>	This product does not contain any known or suspected endocrine disruptors
<u>Other adverse effects</u>	No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

<u>Waste treatment methods</u> Waste from Residues/Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal

## SECTION 14: TRANSPORT INFORMATION

<u>IMDG/IMO</u>	
UN-No	UN2920
Hazard Class	8
Subsidiary Hazard Class	3
Packing Group	II
Proper Shipping Name	Corrosive liquid, flammable, n.o.s.
<u>Road and Rail Transport</u>	
UN-No	UN2920
Hazard Class	8
Subsidiary Hazard Class	3
Packing Group	II
Proper Shipping Name	Corrosive liquid, flammable, n.o.s.
<u>IATA</u>	
UN-No	UN2920
Hazard Class	8
Subsidiary Hazard Class	3
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, FLAMMABLE, N.O.S.*
Special Precautions for User	No special precautions required

# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

## SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
2-Bromopropionyl chloride	230-466-2	-	-	-	X	X	-	-	-

### National Regulations

**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 16: OTHER INFORMATION

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**POW** - Partition coefficient Octanol:Water

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**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

**Prepared By** Health, Safety and Environmental Department  
**Revision Date** 25-Mar-2025  
**Revision Summary** Not applicable.

**In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013**



# SAFETY DATA SHEET

2-Bromopropionyl chloride

Revision Date 25-Mar-2025

---

## 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 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**