

### Classified as hazardous in accordance with the criteria of EPA New Zealand

### **Section 1 - Identification**

**Product Identifier** 

Product Name <u>3-Bromobenzyl bromide</u>

**CAS No** 823-78-9

Synonyms alpha,m-Dibromotoluene

Molecular FormulaC7 H6 Br2Molecular Weight249.93

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Product Code 181780000; 181780050; 181780250

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# **Section 2 - Hazard(s) Identification**

Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

HSNO Approval Number HSR002491

**GHS Classification** 

Physical hazards

Based on available data, the classification criteria are not met

**Health hazards** 

Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1

**Environmental hazards** 

Based on available data, the classification criteria are not met

**Label Elements** 

ACR18178 Version 2 10-Mar-2023 Page 1/10



Signal Word Danger

#### **Hazard Statements**

H314 - Causes severe skin burns and eye damage

#### **Precautionary Statements**

#### Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

#### 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

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

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

#### 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

#### Other hazards which do not result in classification

Lachrymator (substance which increases the flow of tears)

# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Benzene, 1-bromo-3-(bromomethyl)-	823-78-9	> 94

### **Section 4 - First Aid Measures**

#### Description of first aid measures

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

required.

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**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

control center immediately. 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.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician immediately.

ACR18178 Version 2 10-Mar-2023 Page 2/10

**Immediate medical attention is required.** Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person.

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.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and (

effects

Causes burns by all exposure routes. 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

Notes to Physician Treat symptomatically.

### **Section 5 - Fire Fighting Measures**

#### **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. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

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

No information available.

#### **Specific Hazards Arising from the Chemical**

The product causes burns of eyes, skin and mucous membranes.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen bromide.

#### Special protective equipment and precautions for fire fighters

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, Protective Equipment and Emergency Procedures

### **Emergency procedures**

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

#### **Environmental Precautions**

Should not be released into the environment. Do not allow material to contaminate ground water system.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

#### Precautions to prevent secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations

#### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

### **Section 7 - Handling and Storage**

### Precautions for Safe Handling

#### Advice on safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume

ACR18178 Version 2 10-Mar-2023 Page 3/10

hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. To maintain product quality: Keep refrigerated. Corrosives area.

#### **Incompatible Materials**

Bases. Alcohols. Amines. Metals. Oxidizing agent.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

# **Section 8 - Exposure Controls and Personal Protection**

#### Control parameters

#### **Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Appropriate engineering controls

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. 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

#### Individual protection measures, such as personal protective equipment

Eye Protection Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial

applications)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Nitrile rubber, Neoprene,	See manufacturers	-	AS/NZS 2161	(minimum requirement)
Natural rubber, PVC.	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 Long sleeved clothing

**Repiratory Protection**Use an AS/NZS 1716 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 in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

Recommended Filter type: Particulates filter conforming to EN 143 (or AUS/NZ equivalent)

ACR18178 Version 2 10-Mar-2023 Page 4/10

Recommended half mask:- Particle filtering: EN149:2001 (or AUS/NZ equivalent)

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

Physical State Powder Solid

Appearance White

Odor No information available
Odor Threshold No data available
pH No information available

Melting Point/Range 37 - 42 °C / 98.6 - 107.6 °F

Softening Point No data available Boiling Point/Range 130 °C / 266 °F

Boiling Point/Range130 °C / 266 °F@ 12 mmHgFlammability (liquid)Not applicableSolid

Flammability (solid,gas) No information available

**Explosion Limits** No data available

Flash Point > 110 °C / > 230 °F Method - No information available

Autoignition Temperature No data available

**Decomposition Temperature** No data available

Viscosity Not applicable Solid

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor PressureNo data availableDensity / Specific GravityNo data availableBulk DensityNo data available

Vapor Density Not applicable Solid

Particle characteristics No data available

Other information

Molecular Formula C7 H6 Br2 Molecular Weight 249.93

Evaporation Rate Not applicable - Solid

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

**Stability** No information available.

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Hazardous Polymerization No information available.

**Hazardous Reactions** None under normal processing.

**Conditions to Avoid** Incompatible products, Exposure to moist air or water.

Incompatible Materials Bases, Alcohols, Amines, Metals, Oxidizing agent.

ACR18178 Version 2 10-Mar-2023 Page 5 / 10

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen bromide.

# Section 11 - Toxicological Information

#### **Acute Effects**

#### Information on likely routes of exposure

Product Information No acute toxicity information is available for this product

Inhalation Avoid breathing dust or spray mist. May be harmful if inhaled.

Eyes Avoid contact with eyes. Lachrymator (substance which increases the flow of tears).

Corrosive to the eyes and may cause severe damage including blindness.

Skin Avoid contact with skin. Causes burns. Skin Corrosion/Irritation.

**Ingestion** May be harmful if swallowed.

#### Numerical measures of toxicity

(a) acute toxicity;

Oral No data available
Dermal No data available
Inhalation No data available

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(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; Not applicable

Solid

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

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.

ACR18178 Version 2 10-Mar-2023 Page 6/10

# **Section 12 - Ecological Information**

**Ecotoxicity** 

Aquatic ecotoxicity Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

Terrestrial ecotoxicity There is no data for this product

Persistence and Degradability

**Persistence** Insoluble in water, Persistence is unlikely, based on information available.

**Bioaccumulative Potential** May have some potential to bioaccumulate

Mobility Spillage unlikely to penetrate soil. The product contains volatile organic compounds (VOC)

which will evaporate easily from all surfaces. Is not likely mobile in the environment due its

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

Other adverse effects

**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 treatment methods

Waste from Residues/Unused

**Products** 

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Disposal agencies or waste contractors must comply with the New Zealand Hazardous

Substances (Disposal) Regulations . Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to

sewer. Large amounts will affect pH and harm aquatic organisms.

# **Section 14 - Transport Information**

NZS 5433:2020

UN3261 **UN-No** 

**Proper Shipping Name** Corrosive solid, acidic, organic, n.o.s.

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**Technical Shipping Name** 3-Bromobenzyl bromide

**Hazard Class Packing Group** 

IATA

**ACR18178** Version 2 Page 7/10 10-Mar-2023

UN-No UN3261

**Proper Shipping Name**Corrosive solid, acidic, organic, n.o.s.

**Technical Shipping Name** 3-Bromobenzyl bromide

Hazard Class 8
Packing Group ||

IMDG/IMO

UN-No UN3261

**Proper Shipping Name**Corrosive solid, acidic, organic, n.o.s.

**Technical Shipping Name** 3-Bromobenzyl bromide

Hazard Class
Packing Group

Environmental hazards No hazards identified

Transport in bulk according to Annex II of MARPOL 73/78 and the

IBC Code

Not applicable, packaged goods

Special Precautions No special precautions required. Please refer to the applicable dangerous goods

regulations for additional information.

Additional information None known

# **Section 15 - Regulatory Information**

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

HSNO Approval Number	HSR002491

#### **National Regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

#### Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

#### Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

**International Regulations** 

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Authorisation/Restrictions according to EU REACH

Not applicable

**International Inventories** 

ACR18178 Version 2 10-Mar-2023 Page 8/10

New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
Benzene,	823-78-9	X	-	212-519-1	-	-	-	X	X
1-bromo-3-(bromomethyl)-									

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	PICCS	ISHL	ENCS
Benzene, 1-bromo-3-(bromomethyl)-	823-78-9	X	ACTIVE	-	Х	-	-	-

Legend: X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

### **Section 16 - Other Information**

# This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations

#### Legend

NZIoC - New Zealand Inventory of Chemicals

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

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

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer NZS 5433:2020 - Transport of Dangerous Goods on Land

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

LD50 - Lethal Dose 50%

**EC50** - Effective Concentration 50% **WEL** - Workplace Exposure Limit

**DNEL** - Derived No Effect Level

vPvB - very Persistent, very Bioaccumulative

**VOC** - (Volatile Organic Compound)

POW - Partition coefficient Octanol:Water

AICS - Australian Inventory of Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical

Substances/EU List of Notified Chemical Substances

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

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

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

PNEC - Predicted No Effect Concentration

**OECD** - Organisation for Economic Co-operation and Development **IMO/IMDG** - International Maritime Organization/International Maritime

Dangerous Goods Code

LC50 - Lethal Concentration 50%

ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment

NOEC - No Observed Effect Concentration

**BCF** - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

#### Key literature references and sources for data

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

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

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

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

#### **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.

Revision Date 10-Mar-2023 Revision Summary Not applicable

### Disclaimer

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

ACR18178 Version 2 10-Mar-2023 Page 9 / 10

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**

ACR18178 Version 2 10-Mar-2023 Page 10 / 10