# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ACR43695

## Potassium bromide

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

产品说明: 溴化钾

Product Description: Potassium bromide

Cat No.: 436950000; 436950100; 436950500

Synonyms Bromide Salt of Potassium.; Hydrobromic Acid Potassium Salt

CAS No 7758-02-3 Molecular Formula Br K

Supplier UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name** Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

Emergency Telephone Number For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US:**001-800-424-9300 / **Europe:**001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

Physical State Appearance Odor
Solid White Odorless

**Emergency Overview** 

May be harmful if swallowed. Causes serious eye irritation. Hygroscopic.

#### Classification of the substance or mixture

Acute Oral Toxicity	Category 5
Serious Eye Damage/Eye Irritation	Category 2

## **Label Elements**



Signal Word Warning

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#### **Hazard Statements**

H303 - May be harmful if swallowed

H319 - Causes serious eye irritation

#### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

P270 - Do not eat, drink or smoke when using this product

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

P280 - Wear eye protection/ face protection

#### Response

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

P312 - Call a POISON CENTER or doctor if you feel unwell

#### 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**

Hygroscopic.

#### **Health Hazards**

May be harmful if swallowed. Causes serious eye irritation.

#### **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 water solubility. The product is water soluble, and may spread in water systems.

Toxicity to Soil Dwelling Organisms. Toxic to terrestrial vertebrates. This product does not contain any known or suspected endocrine disruptors.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Potassium bromide	7758-02-3	>95

## **SECTION 4. FIRST AID MEASURES**

## **General Advice**

If symptoms persist, call a physician.

#### **Eye Contact**

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

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

#### Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

## Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

## Most important symptoms and effects

None reasonably foreseeable.

#### Self-Protection of the First Aider

Use personal protective equipment as required.

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## **Notes to Physician**

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

No information available.

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

Non-combustible. Thermal decomposition can lead to release of irritating gases and vapors.

#### **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.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

#### **Environmental Precautions**

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

## Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

#### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

## 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. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### **Exposure Controls**

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## **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location. 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 (European standard - EN 166)

Hand Protection Protective gloves

Glove material Natural rubber Nitrile rubber	Breakthrough time See manufacturers recommendations	Glove thickness	<b>EU standard</b> EN 374	Glove comments (minimum requirement)
Neoprene				
PVC				

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

**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

5% aq. solution

Solid

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 **Recommended Filter type:** Particulates filter conforming to EN 143

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.

**Recommended half mask:-** Particle filtering: EN149:2001 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** Prevent product from entering drains.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

AppearanceWhitePhysical StateSolid

**Odor** Odorless

Odor Threshold No data available

pH 5-8.8

Melting Point/Range734 °C / 1353.2 °FSoftening PointNo data availableBoiling Point/Range1435 °C / 2615 °F

Flash Point No information available Method - No information available

**Evaporation Rate** Not applicable

Flammability (solid,gas)

Explosion Limits

No information available

No data available

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**Vapor Pressure** <0.01 mmHg @ 20 °C

**Vapor Density** Not applicable Solid

No data available Specific Gravity / Density **Bulk Density** No data available Water Solubility 650 g/L (20°C)

No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

No data available **Autoignition Temperature** 

**Decomposition Temperature** > 800°C

**Viscosity** Not applicable Solid

No information available **Explosive Properties** No information available **Oxidizing Properties** 

**Molecular Formula** Br K **Molecular Weight** 119

## **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions. Hygroscopic.

**Hazardous Reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water. **Conditions to Avoid** 

Materials to avoid Strong oxidizing agents.

Hazardous Decomposition Products Halogenated compounds. Potassium oxides.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## **Product Information**

(a) acute toxicity:

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium bromide	LD50 = 3070 mg/kg (Rat)		

(b) skin corrosion/irritation; No data available

Category 2 (c) serious eye damage/irritation;

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

No data available (e) germ cell mutagenicity;

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

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(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

**Target Organs** No information available.

Not applicable (j) aspiration hazard;

Solid

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information

Symptoms / effects,both acute and No information available

delayed

## **SECTION 12. ECOLOGICAL INFORMATION**

Contains a substance which is:. Harmful to aquatic organisms. The product contains **Ecotoxicity effects** 

following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Potassium bromide	Pimephales promelas:	EC50: >30 mg/L 96 h		
	LC50 >30mg/L 96 h			

Persistence and Degradability

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

Degradability Not relevant for inorganic substances.

Degradation in sewage Contains substances known to be hazardous to the environment or not degradable in waste treatment plant

water treatment plants.

**Bioaccumulative Potential** Bioaccumulation is unlikely

Mobility in soil The product is water soluble, and may spread in water systems Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

**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.

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

**Other Information** Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains.

## **SECTION 14. TRANSPORT INFORMATION**

Not Regulated Road and Rail Transport

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IMDG/IMO Not regulated

IATA Not regulated

**Special Precautions for User** 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), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	•	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Potassium bromide	-	-	X	Х	231-830-3	Х	X	Х	Х	Χ	Х	KE-29079

#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

28-Oct-2010 **Creation Date Revision Date** 12-Apr-2024 **Revision Summary** Not applicable.

## **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.

#### Legend

**CAS** - Chemical Abstracts Service

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

TWA - Time Weighted Average

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

IARC - International Agency for Research on Cancer

**DNEL** - Derived No Effect Level

WEL - Workplace Exposure Limit

PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50%

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

vPvB - very Persistent, very Bioaccumulative

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ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

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

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

**BCF** - Bioconcentration factor

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

**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

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**End of Safety Data Sheet**