

## Material Safety Data Sheet

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Version 1.4

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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1 - Product and Company Information

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Product Name	POTASSIUM BROMIDE, 99.99%
Product Number	229792
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
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Emergency Phone #	+61 2 9841 0566

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
POTASSIUM BROMIDE	7758-02-3	231-830-3	None
Formula	KBr		
Molecular Weight	119.01 AMU		
Synonyms	Bromide salt of potassium * Tripotassium tribromide		

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3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Irritating to eyes, respiratory system and skin.

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4 - First Aid Measures

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## AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

## AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

## AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

## AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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5 - Fire Fighting Measures

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#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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### 6 - Accidental Release Measures

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#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

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### 9 - Physical and Chemical Properties

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Appearance

Physical State: Solid

Property

Value

At Temperature or Pressure

pH

5 - 6

BP/BP Range

1,435 °C

MP/MP Range

734 °C

Flash Point

N/A

Flammability

N/A

Autoignition Temp

N/A

Oxidizing Properties

N/A

Explosive Properties

N/A

Explosion Limits

N/A

Vapor Pressure	< 0.01 mmHg	20 °C
SG/Density	2.75 g/cm3	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:1 M in H2O, 20°C complete, colorless	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents, Strong acids, Heavy metal salts, Aluminum, Potassium.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen bromide gas.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: TS7650000

### ACUTE TOXICITY

LD50

Oral

Rat

3070 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

LD50

Oral

Mouse

3120 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

LD50

Intraperitoneal

Mouse

1030 MG/KG

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

LD50

Intraperitoneal

Guinea pig

980 MG/KG

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

#### SIGNS AND SYMPTOMS OF EXPOSURE

Can cause CNS depression. Potassium bromide on prolonged contact with moist skin can produce severe irritation or burns.

Prolonged inhalation of dust can produce bronchitis. Ingestion of large quantities can cause irritability, confusion, tremors, acne-like skin eruptions, memory loss, headache, slurred speech, and anorexia. Prolonged exposure can cause: Blurred vision.

Bromide rashes, especially of the face, and resembling acne and furunculosis, often occur when bromide inhalation or administration is prolonged. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

#### TARGET ORGAN INFORMATION

Central nervous system. Eyes.

#### CHRONIC EXPOSURE - MUTAGEN

Result: Laboratory experiments have shown mutagenic effects.

Rat

200 MG/KG

Cell Type: Ascites tumor

Cytogenetic analysis

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#### 12 - Ecological Information

No data available.

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#### 13 - Disposal Considerations

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#### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

##### RID/ADR

Non-hazardous for road transport.

##### IMDG

Non-hazardous for sea transport.

##### IATA

Non-hazardous for air transport.

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## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xi

Irritant.

R-PHRASES: 36/37/38

Irritating to eyes, respiratory system and skin.

S-PHRASES: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

SWITZERLAND

SWISS POISON CLASS: 3

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## 16 - Other Information

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### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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