

## Material Safety Data Sheet

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Version 1.2  
According to 91/155/EEC

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1 - Product and Company Information

Product Name SODIUM BROMIDE, 99.99+%

Product Number 229881

Company Sigma-Aldrich Pty, Ltd  
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Castle Hill NSW 1765  
Australia

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## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
SODIUM BROMIDE	7647-15-6	231-599-9	None
Formula	NaBr		
Molecular Weight	102.9 AMU		
Synonyms	Bromide salt of sodium * Bromnatrium (German) *		
	Sedoneural		

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## 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Not hazardous according to Directive 67/548/EC.

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## 4 - First Aid Measures

## AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## AFTER SKIN CONTACT

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

## AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## AFTER INGESTION

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

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## 5 - Fire Fighting Measures

## 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)**

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

#### **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:** Avoid inhalation. 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:** Wear dust mask.

**Hand Protection:** Protective gloves.

**Eye Protection:** Chemical safety goggles.

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## **9 - Physical and Chemical Properties**

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<b>Appearance</b>	<b>Physical State:</b> Solid	
<b>Property</b>	<b>Value</b>	<b>At Temperature or Pressure</b>
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	747 °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	1 mmHg	806 °C

SG/Density	1 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	N/A

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong acids, Strong oxidizing agents.

### 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: VZ3150000

#### ACUTE TOXICITY

LD50

Skin

Rabbit

> 2,000 mg/kg

LD50

Oral

Rat

3500 mg/kg

LD50

Subcutaneous

Rat

2900 MG/KG

Remarks: Skin and Appendages: Other: Hair.

LD50

Oral

Mouse

7000 mg/kg

LD50

Intraperitoneal

Mouse

5 GM/KG

LD50

Subcutaneous

Mouse

5020 MG/KG

#### IRRITATION DATA

Eyes

Rabbit

Remarks: Mild irritation effect

Skin

Rabbit

Remarks: No irritation effect

#### SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Circulatory collapse. 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: May cause skin irritation.

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

Eye Contact: May cause eye irritation.

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

Ingestion: May be harmful if swallowed.

#### TARGET ORGAN INFORMATION

Central nervous system.

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat

Dose: 47520 MG/KG

Route of Application: Oral

Exposure Time: (90D MALE/90D PRE)

Result: Effects on Fertility: Mating performance (e.g., # sperm positive females per # females mated; # copulations per # estrus cycles). Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Wearing or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat

Dose: 3600 MG/KG

Route of Application: Oral

Exposure Time: (3-20D PREG)

Result: Effects on Newborn: Wearing or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat

Dose: 720 MG/KG

Route of Application: Oral

Exposure Time: (3-20D PREG)

Result: Effects on Newborn: Behavioral.

Species: Rat

Dose: 1620 MG/KG

Route of Application: Oral

Exposure Time: (90D MALE)

Result: Paternal Effects: Testes, epididymis, sperm duct.

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#### 12 - Ecological Information

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No data available.

#### ECOTOXICOLOGICAL EFFECTS

Test Type: LC50 Fish  
Species: Poecilia reticulata  
Time: 96 h  
Value: 160,000 mg/l

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 48 h  
Value: 5,800 mg/l

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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

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#### 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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Not hazardous according to Directive 67/548/EC.

#### 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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