

## SAFETY DATA SHEET

### Section 1: Identification

Product name: Sodium bromide  
 Product use: For laboratory research purposes.  
 Supplier: Trace Sciences International  
 40 Vogell Rd Suite 42  
 Richmond Hill, ON L4B 3N6  
 CANADA  
 Telephone: +1 905-770-1100  
 Fax: +1 905-770-1160  
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### Section 2: Hazard(s) Identification

#### 2.1 GHS Classification

Reproductive toxicity (Category 2), H361  
 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336  
 Specific target organ toxicity - repeated exposure (Category 2), Central nervous system, H373

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



##### Signal word

Warning

##### Hazard statement(s):

H336 May cause drowsiness or dizziness.  
 H361 Suspected of damaging fertility or the unborn child.  
 H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

##### Precautionary statement(s):

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe dust.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.  
 P501 Dispose of contents/ container to an approved waste disposal plant.

### Section 3: Composition/ Information on Ingredients

Formula : NaBr  
 Molecular Weight : 102.89 g/mol

Material	CAS-No.	EC-No.	Index-No.	Concentration
Sodium bromide	7647-15-6	231-599-9	-	<=100%

## Section 4: First-Aid Measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move person out of dangerous area if safe to do so.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at least 15 minutes. Use chemical shower if available. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contacts if possible.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## Section 5: Fire-Fighting Measures

### 5.1 Conditions of flammability

Not flammable or combustible.

### 5.2 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.3 Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Hydrogen bromide gas, sodium oxides

### 5.4 Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.5 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## Section 6: Accidental Release Measures

### 6.1 Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

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

## Section 7: Handling and Storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### 7.2 Conditions for safe storage

Hygroscopic

Keep container tightly closed in a dry and well-ventilated place.

## Section 8: Exposure Controls/Personal Protection

### 8.1 Components with workplace control parameters

No data available

### 8.2 Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Specific engineering controls

Use mechanical exhaust or laboratory fume hood to avoid exposure.

## Section 9: Physical and Chemical Properties

### Appearance

Form	Crystalline
Colour	Colourless

### Safety Data

pH	5.74 at 430 g/l at 22.5 °C (72.5 °F)
Melting point/freezing point	755 °C (1,391 °F) - lit.
Boiling point	1,390 °C 2,534 °F at ca.1,013 hPa

Flash point	Not applicable
Flammability (solid, gas)	No data available
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	1 hPa (1 mmHg) at 806 °C (1,483 °F)
Density	3.2 g/cm <sup>3</sup> at 25 °C (77 °F)
Water solubility	946 g/l at 25 °C (77 °F)
Partition coefficient: n-octanol/water	No data available
Relative vapour density	No data available
Odour	Odourless
Odour Threshold	No data available
Evaporation rate	No data available

## Section 10: Stability and Reactivity

### 10.1 Chemical stability

Stable under recommended storage conditions

### 10.2 Possibility of hazardous reactions

Risk of explosion with:

Alkali metals, halogen-halogen compounds

Generates dangerous gases or fumes in contact with:

Strong acids

### 10.3 Conditions to avoid

Avoid moisture. Heat.

### 10.4 Materials to avoid

Strong acids, strong oxidizing agents, alkali metals, halogens

### 10.5 Hazardous decomposition products

See section 5

## Section 11: Toxicological Information

### Acute toxicity

#### Oral

LD50 Oral - Rat - male and female - 4,200 mg/kg  
(OECD Test Guideline 401)

#### Inhalation

No data available

#### Dermal

LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg  
(OECD Test Guideline 402)

#### Other information on acute toxicity

No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h  
(US-EPA)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: slight irritation  
(US-EPA)

**Respiratory or skin sensitization**

Maximization Test - Guinea pig

Result: negative  
(OECD Test Guideline 406)

**Germ cell mutagenicity**

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: unscheduled DNA synthesis assay

Test system: mammalian cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 482

Result: negative

Test Type: Micronucleus test

Species: Mouse

Cell type: Bone marrow

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Remarks: The value is given in analogy to the following substances: ammonium bromide

**Carcinogenicity**

No data available

**Reproductive toxicity**

Suspected of damaging fertility or the unborn child.

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

May cause damage to organs through prolonged or repeated exposure - Central nervous system

**Aspiration hazard**

No data available

### Signs and Symptoms of Exposure

Effects due to ingestion may include: sedation

### Additional Information

Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 100 mg/kg - LOAEL (Lowest observed adverse effect level) - 225 mg/kg

RTECS: VZ3150000

## Section 12: Ecological Information

### 12.1 Toxicity

Toxicity to fish	Semi-static test LC50 - Fish - > 440 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test NOEC - Daphnia magna (Water flea) - >= 1,000 mg/l - 48 h (US-EPA)
Toxicity to algae	ErC50 - Skeletonema costatum (marine diatom) - > 440 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209)
Toxicity to fish (Chronic toxicity)	Semi-static test NOEC - Poecilia reticulata (guppy) - 10 mg/l - 124 d Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	Semi-static test NOEC - Daphnia magna (Water flea) - 7.5 mg/l - 21 d Remarks: (ECHA)

### 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

Bioaccumulation - 7 d at 25 °C - 53.11 mg/l (Sodium bromide)

Bioconcentration factor (BCF): 0.23

### 12.4 Mobility in soil

No data available

### 12.5 PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

## Section 13: Disposal Considerations

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### Contaminated packaging

Dispose of as unused product.

#### Section 14: Transport Information

**IATA**

Not dangerous good

#### Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

#### Section 16: Other Information

**Further information**

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**Date Prepared: February 10, 2025**