

Safety Data Sheet SODIUM BROMIDE

SDS no. 9K81T62M • Version 1.0 • Date of issue: 2024-07-08

SECTION 1: Identification

GHS Product identifier

Product name

SODIUM BROMIDE

Other means of identification

Name SODIUM BROMIDE AR SODIUM BROMIDE LR Product Code SA084 SL084

Recommended use of the chemical and restrictions on use

Photography, medicine (sedative), preparation of bromides, organic chemicals and laboratory reagent.

Supplier's details

Name Address ChemSupply Australia Pty Ltd 38-50 Bedford Street 5013 Gillman South Australia Australia

Telephone email 08 8440 2000 www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 102.89

Components

Component	CAS no.	Concentration
Sodium bromide (EC no.: 231-599-9)	7647-15-6	100 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.
In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. If rapid recovery does not occur, obtain medical attention
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO2, water spray or foam. Large fire: Use water spray, fog or foam. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific hazards arising from the chemical

Hazards from Combustion Products: May librate toxic fumes in fire such as hydrogen bromide.

Material does not burn. Fire or heat will produce toxic gases. Runoff may pollute waterways.

Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms. Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid generation or accumulation of dusts. Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep containers closed at all times. Store away from acids. Keep container dry Keep away from light

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical	state	
Appearance		

Solid White crystalline powder or granules.

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Color Odor Odor threshold Melting point/freezing point Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit/flammability limit Flash point Explosive properties Auto-ignition temperature Decomposition temperature Oxidizing properties pH Kinematic viscosity Solubility

Partition coefficient n-octanol/water (log value) Vapor pressure Evaporation rate Density and/or relative density Relative vapor density Particle characteristics

Supplemental information regarding physical hazard classes No data available.

Further safety characteristics (supplemental)

Other Information: Taste: Saline and somewhat bitter taste.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under normal conditions. Hygroscopic (absorbs moisture from the air, becoming very hard). Sensitive to heating and light.

Possibility of hazardous reactions

Will react violently with bromine trifluoride.

Conditions to avoid

Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong acids, strong oxidizing agents, alkali metals, halogen-halogen compounds, bromine trifluoride, alkaloidal and heavy metal salts.

Hazardous decomposition products

Bromine fumes released over 800 $^\circ\text{C}$; hydrogen bromide gas, sodium oxides.

No data available. Odourless. No data available. 755 °C 1390 - 1393 °C No data available. >750 °C No data available. ~ 5.4 (50 g/l, H20, 20 °C) No data available. Solubility in Water: 905 g/l (20 °C) Solubility in Organic Solvents: Moderately soluble in alcohol, Insoluble in other organic solvents. No data available. 1 hPa (@ 806 °C) No data available. Specific Gravity: 3.208 No data available. No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 3.5 g/kg.

Ingestion: Ingestion of material may cause nausea, vomiting and abdominal pain. May cause depression, sedation and confusion. Ingestion in large quantities increases the chance of bromide poisoning which may increase absorption and lead to CNS depression as well as eye and brain effects. Symptoms may include blurred vision and other eye effects, dizziness, skin rash, drowsiness, irritability, hallucinations and coma.

Inhalation: Inhalation of dust may cause respiratory tract irritation with symptoms including coughing and shortness of breath.

Skin corrosion/irritation Acute Toxicity - Dermal: LD50 (rabbit): > 2000 mg/kg

May cause skin rashes, irritation, redness and pain.

Serious eye damage/irritation Contact may cause transient irritation, redness and pain. May lead to conjunctivitis and blurred vision.

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available.

Carcinogenicity No data available.

Reproductive toxicity No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure No data available.

Specific target organ toxicity (STOT) - repeated exposure No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Repeated or prolonged exposure by any route may cause bromism, visual disturbances, skin rashes (bromaderma). Repeated ingestion of small amounds may cause central nervous system depression, mental deterioration, depression, ataxia, psychoses, memory loss, irritability and headaches. May cause confusion, vomiting, spasms (coma) after ingestion of large amounts.

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Sodium bromide: mouse LD50 intraperitoneal 5gm/kg (5000mg/kg) Archives Internationales de Pharmacodynamie et de Therapie. Vol. 128, Pg. 391, 1950.

mouse LD50 oral 7gm/kg (7000mg/kg) Schweizerische Medizinische Wochenschrift. Vol. 85, Pg. 305, 1955.

Link to PubMed

mouse LD50 subcutaneous 5020mg/kg (5020mg/kg) Journal of Pharmaceutical Sciences. Vol. 50, Pg. 858, 1961.

Link to PubMed

rabbit LDLo oral 580mg/kg (580mg/kg) "Drug Dosages in Laboratory Animals - A Handbook," Rev. ed., Barnes, C.D., and L.G. Eltherington, Berkeley, Univ. of California Press, 1973Vol. -, Pg. 243, 1973.

rat LD50 oral 3500mg/kg (3500mg/kg) Journal of Pharmacology and Experimental Therapeutics. Vol. 55, Pg. 200, 1935.

rat LD50 subcutaneous 2900mg/kg (2900mg/kg) SKIN AND APPENDAGES (SKIN): HAIR: OTHER Nippon Yakurigaku Zasshi. Japanese Journal of Pharmacology. Vol. 56, Pg. 377, 1960.

SECTION 12: Ecological information

Toxicity

Environmental Protection: Do not allow material or runoff to enter surface water, groundwater or sewerage system.

Acute Toxicity - Fish: LC50 (P. reticulata): 16000 mg/l/96 h.

Acute Toxicity - Daphnia: EC50 (Daphnia magna): 5800 mg/l/48 h.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP Poison Schedule: NS

Canadian Domestic Substances List (DSL)

Chemical name: Sodium bromide (NaBr) CAS: 7647-15-6

SECTION 16: Other information

Further information/disclaimer

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.' Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020. Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020. Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019 Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au IATA, Dangerous Goods Regulations (DGR) IMO, International Maritime Dangerous Goods Code (IMDG)