



Material Safety Data Sheet

MSDS has been prepared in accordance with EC Directive 93/112/EEC

Section 1 Chemical Product and Company Identification

Name: Aqueous solution of sodium bromide		
Synonyms: Bromnatrium	Product type: Liquid density certified reference material	Date revised: March 2003 Previous: June 2002
Manufacturer: H & D Fitzgerald Ltd. Cefn Du, Tremeirchion, St Asaph, Clwyd, LL17 0US UK		
Prepared by: Denis Fitzgerald		
Chemical family: Aqueous solution of sodium bromide		
Poison schedule number: None allocated		
Chemical Formula: NaBr		

Section 2 Composition / Information on Hazardous ingredients

Substance name	C.A.S. No.	EINECS No.	% weight	HSCN (Tariff#)
water	7732-18-5	2317912	70%	28510010
sodium bromide	7647-15-6	2315999	30%	28275100

Section 3 Hazards identification

Emergency overview Colourless odourless liquid. Supplied sealed in a 10ml glass ampoule. Caution: Irritating to eyes. Potential environmental effects: None in the quantity supplied in an ampoule.
Potential health effects Eyes: Irritating to eyes. Skin: May cause transient irritation. Ingestion: Harmful if swallowed. Chronic: None known. This material is not listed as carcinogenic.

Section 4 First Aid measures

Eyes: Wash eyes with large amounts of water or normal saline. If symptoms develop, seek medical advice.
Skin: Wash with soap and water. Remove contaminated clothing. If symptoms develop, seek medical advice.
Ingestion: Do not seek to induce vomiting. If the victim is conscious, rinse mouth with water. Seek medical advice.

Section 5 Fire fighting measures		
Extinguishing media: Use extinguishing media appropriate for surrounding fire		
Unsuitable media: None		
Lower explosive limit: Not applicable	Upper explosive limit: Not applicable	Flash point: Not applicable
Flammability classification: Not flammable	Flame propagation: Not applicable	Ignition in air: Not applicable
Combustion hazards: Not combustible		
Protective equipment: None needed		
Unusual fire hazards: If the solution is evaporated to dryness, the resulting solid will release bromine if heated to a high temperature.		
Static charge effects: Not applicable		

Section 6 Spillage measures
Spill cleanup: Mop up liquid and place in waste disposal container. Use eye protection during cleaning.
Environmental precautions: None needed for the quantity supplied in an ampoule.

Section 7 Handling and storage
Handling precautions: Avoid contact with eyes.
Storage precautions: Store ampoule in package until ready to use. Store in a cool place if possible (less than 25°C)

Section 8 Exposure controls and personal protection
Exposure guidelines: No occupational exposure limits established.
Personal protective equipment
Eye/Face protection: Safety glasses are recommended to minimise eye contact.
Hands: Wash hands with soap before eating or drinking.

Section 9 Physical and chemical properties		
Physical state: Liquid	Colour: Colourless	Odour: None
pH: 6.1	Freezing point: < -20°C	Boiling point: ≈105°C
Miscibility with water: The solution mixes completely with water	Density of liquid: ≈1200 kgm ⁻³	
Vapour pressure: Slightly lower than that of water at the same temperature	Molecular weight: Sodium bromide 102.9	

Section 10 Stability and reactivity
Conditions to avoid: Avoid contact with strong acids.
Incompatible materials: Reactions are unlikely at the concentration of the solution provided.
Reactivity: None known.
Hazardous decomposition: If the solution is evaporated to dryness, the resulting solid will release bromine if heated to a high temperature.
Hazardous polymerisation: None known.

Section 11 Toxicological information

Acute effects	
Acute inhalation:	Not tested
Acute ingestion:	LD ₅₀ (rat): 3500 mg/kg. (for solid sodium bromide)
Acute skin:	LD ₅₀ (rabbit): 2900 mg/kg (for solid sodium bromide)(essentially non-toxic)
Eye irritation:	Not tested
Skin irritation:	Not tested
Chronic effects	
Chronic ingestion:	Not tested
Chronic eye:	Not tested
Chronic skin:	Bromide rashes resembling acne can occur after prolonged exposure
Mutagenic effects:	Not tested
Reproductive effects:	Not tested
Sensitisation	Not tested

Section 12 Ecological information

Persistence / degradability: Material does not show potential to bioconcentrate from water.
Ecotoxicity: Sodium bromide is a naturally occurring component of sea water.

Section 13 Disposal

For small quantities: Flush the aqueous solution down the drain / mop up with paper and dispose of as none hazardous waste. Observe all national and local environmental regulations.

Section 14 Transport information

UN Number Not applicable	UN shipping name Not regulated	UN class Not applicable
RID /ADR Non hazardous for rail or road	IMDG shipping name Non hazardous for sea freight	ICAO / IATA: Non hazardous for air freight

Section 15 Regulatory information

European classification: Label symbols: none S25 Avoid contact with eyes.
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Section 16 Other information

Reason for revision: water content added in section 2
Disclaimer: H&D Fitzgerald believes that data given here is accurate. It is derived from published information about solid sodium bromide. No warranty, expressed or implied, is intended. The data is provided for your information and consideration when using sodium bromide solution as a certified reference material for the calibration of density meters. H&D Fitzgerald assumes no legal responsibility for its use.