



Safety Data Sheet

SDS has been prepared in accordance with Regulation (EC) No. 1907/2006

This Safety Data Sheet is written in reference to a sealed glass ampoule containing 10ml of the product named below.

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name: Aqueous solution of sodium bromide

Synonyms: Bromnatrium	Product type: Liquid density standard	Date revised: Apr 2024 Previous: Jun 2022
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	EC No.:	CAS No.:
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Water	231-791-2	7732-18-5
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Sodium bromide	231-599-9	7647-15-6
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1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: For use in the calibration of density meters.

Uses advised against:

1.3 Details of the supplier of the Safety Data Sheet

Company: H&D Fitzgerald Ltd.
Address: Cefn Du, Tremeirchion, St Asaph, Denbighshire, LL17 0US, UK
Telephone #: +44 (0)1352 720 774
Email address: admin@density.co.uk

1.4 Emergency telephone number

+44 (0)1352 720 774

Section 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Reproductive toxicity (Category 2), H361fd

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - repeated exposure (Category 2), Central nervous system, H373

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements:

Pictogram:



Signal word: Warning

Hazard statement(s):	H336	May cause drowsiness or dizziness.
	H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
	H373	May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

2.3 Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3 Composition / Information on ingredients

Substance name	C.A.S. No.	EINECS No.	Index-No. in CLP Annex IV	Classification	Concentration
water	7732-18-5	231-791-2	-	Not classified	70%
Sodium bromide	7647-15-6	231-599-9	-	Not classified	30%
Formula:	NaBr				
Molecular Weight:	102.9g/mol				

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.

Following inhalation: If breathed in, move person into fresh air. If symptoms develop, seek medical advice.

Following ingestion: Do not seek to induce vomiting. If the victim is conscious, rinse mouth with water. Seek medical advice.

Following eye contact: Wash eyes with large amounts of water or normal saline. If symptoms develop, seek medical advice.

Following skin contact: Wash with soap and water. Remove contaminated clothing. If symptoms develop, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Following ingestion: May be harmful if swallowed.

Following eye contact: May cause eye irritation.

Following skin contact: May be harmful if absorbed through skin. May cause skin irritation.

Delayed effects: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Following ingestion: Do not induce vomiting. Consult a physician.

Following inhalation: Do not induce vomiting. Consult a physician.

Following eye/skin contact: If symptoms develop, consult a physician.

Section 5 Fire fighting measures

5.1 Extinguishing media

Extinguishing media: Use extinguishing media appropriate for surrounding fire

Unsuitable media: None

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Not combustible

5.3 Advice for firefighters

Special protective equipment for fire-fighters:	None needed
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Section 6 Accidental release measures	
6.1 Personal precautions, protective equipment and emergency procedures	
Protective equipment:	None needed.
Personal precautions:	Avoid contact with eyes.
6.2 Environmental precautions	
None needed for the quantity supplied in an ampoule.	
6.3 Methods and material for containment and cleaning up	
Mop up liquid and place in waste disposal container. Use eye protection during cleaning.	

Section 7 Handling and storage	
7.1 Precautions for safe handling	
Handling precautions:	Avoid contact with eyes.
7.2 Conditions for safe storage, including any incompatibilities	
Storage precautions:	Store ampoule in package until ready to use. Store in a cool place if possible (less than 25°C)
7.3 Specific end use	
Recommendations:	Liquid density standard for calibration of density meters.

Section 8 Exposure controls and personal protection	
Components with work place control parameters	
No occupational exposure limits established.	
Personal protective equipment	
Eye/Face protection:	Safety glasses are recommended to minimise eye contact.
Hand protection:	Wash hands with soap before eating or drinking.
Other skin protection:	Use of protective clothing is good industrial practise.
Respiratory protection:	
Hygiene measures:	Wash hands with soap before eating or drinking.
Environmental exposure controls	
No data available.	

Section 9 Physical and chemical properties			
9.1 Information on basic physical and chemical properties			
Appearance: Colourless liquid	Odour: none	Odour threshold: no data available	pH: 6.1
Freezing point: < -20°C	Boiling point & range: ≈105°C	Flash point: not applicable	Evaporation rate: no data available
Flammability: not flammable	Upper/lower flammability or explosive limits: not applicable	Vapour pressure: Slightly lower than that of water at the same temperature	Vapour density: no data available
Density of liquid: ≈1200 kgm ⁻³	Solubility: no data available	Partition coefficient: n-octanol/water no data available	Auto-ignition temperature: not applicable

Decomposition temperature: no data available	Viscosity: no data available	Explosive properties: not applicable	Oxidising properties: no data available
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9.2 Other information
Miscibility with water: The solution mixes completely with water.

Section 10 Stability and reactivity	
10.1 Reactivity	Non known
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	Reactions are unlikely at the concentration of the solution provided.
10.4 Conditions to avoid	Avoid contact with strong acids.
10.5 Incompatible materials	Reactions are unlikely at the concentration of the solution provided.
10.6 Hazardous decomposition products	If the solution is evaporated to dryness, the resulting solid will release bromine if heated to a high temperature.

Section 11 Toxicological information	
11.1 Information on toxicological effects	
Acute toxicity	
Inhalation:	No data available
Ingestion:	LD ₅₀ (rat): 3500 mg/kg. (for solid sodium bromide)
Skin corrosion/irritation:	LD ₅₀ (rabbit): 2900 mg/kg (for solid sodium bromide) Essentially non-toxic
Serious eye damage/irritation:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	Reproductive toxicity – rat – Oral Paternal Effects: Testes, epididymis, sperm duct
Specific target organ toxicity – single exposure:	No data available
Specific target organ toxicity – repeated exposure:	No data available
Aspiration hazard:	No data available
Potential health effects	
Inhalation:	No data available
Ingestion:	No data available
Eye contact:	No data available
Skin contact:	Bromide rashes resembling acne can occur after prolonged exposure.
Mutagenic effects:	No data available
Reproductive effects:	No data available
Sensitisation:	No data available
Additional information:	RTECS: VZ3150000

Section 12 Ecological information	
12.1 Toxicity	
Toxicity to fish	No data available.
Toxicity to daphnia and other aquatic invertebrates	No data available.
12.2 Persistence and degradability	
Degradability:	Material does not show potential to bioconcentrate from water.
12.3 Bioaccumulative potential	
Bioaccumulation:	No data available
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB assessment	
	No data available
12.6 Other adverse effects	No data available

Section 13 Disposal considerations	
General requirements:	Observe all national and local environmental regulations.
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.
Contaminated packaging:	Dispose of as unused product.

Section 14 Transport information	
Not dangerous goods.	

Section 15 Regulatory information	
15.1 Safety health and environmental regulations/legislation specific for the substance or mixture	
	This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.2 Chemical safety assessment	
	No chemical assessment has been carried out for this substance by the supplier.

Section 16 Other information	
Text of H-code(s) mentioned in Section 2 & 3	
H336	May cause drowsiness or dizziness.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Reason for revision:	Update to Section 2.
Disclaimer	
H&D Fitzgerald Ltd believes that data given here is accurate. It is derived from published information about sodium bromide. No warranty, expressed or implied, is intended. The data is provided for your information and consideration when using aqueous sodium bromide as a liquid density standard for the calibration of density meters. H&D Fitzgerald Ltd assumes no legal responsibility for its use.	