

Material Safety Data Sheet BROMINE WATER 2.5%

IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product. The contents and format of this MSDS are in accordance with EC Commission Directive 91/155EEC.

1. **Identification**
Chemical Description Amber liquid, strong odour of bromine

3. **Hazards Identification**
Prolonged contact with skin can cause burns. Vapour irritates respiratory tract and causes pulmonary oedema. Ingestion of the liquid can cause very severe gastro-enteritis. Irritating to eyes and damaging if contact is prolonged.

4. **First Aid Measures**
 - Eye Contact
 - Irrigate thoroughly with water for at least 10 minutes. If discomfort persists obtain medical attention.
 - Inhalation
 - Remove from exposure, rest and keep warm. In severe cases obtain medical attention
 - Skin Contact
 - Wash off thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases obtain medical attention
 - Ingestion
 - Wash out mouth thoroughly with water and give plenty of water to drink. Obtain medical attention.

5. **Fire Fighting Measures**
Extinguishing Media Not Applicable

6. **Accidental Release Measures**
Wear appropriate protective clothing. Inform others to keep a safe distance. Spread soda ash liberally over the spillage. If local regulations permit, mop up cautiously with plenty of water and run to waste, diluting greatly with running water. Otherwise transfer to container and arrange removal by disposal company.
Wash site of spillage thoroughly with water.
For large spillage liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residue should be treated as for small spillage. If material has entered surface drains it may be necessary to inform local authorities, including fire service if flammable.

7. **Handling and Storage**
Special Requirements Keep well closed and protect from light

8. **Exposure controls / Personal Protection (as appropriate to quantities handled)**
Protective Equipment Goggles or face shield, Nitrile gloves, plastic apron, sleeves and boots if handling large quantities
Respiratory Protection Self-contained breathing apparatus
Ventilation - Fume cupboard

9. **Physical and Chemical Properties**

Fire & Explosion Hazard	May evolve toxic fumes in fire
Melting Point(°C)	n/a
Boiling Point(°C)	n/a
Flash Point(°C)	n/a
Solubility in water	Miscible in all proportions
Explosive Limits(%)	Lower n/a, Upper n/a
Auto-ignition Temp (°C)	n/a

10. **Stability and Reactivity**

Stability	Slowly decreases in strength when exposed to air and light				
Reactivity with water	None				
Other Known Hazard	Can react with ammonia				
	Can react with some metals and with phosphorus				
Avoid Contact with	Water (no)	Acids (no)	Bases (no)	Oxidisers (no)	Combustibles (no)

11. **Toxicological information**

Toxicity	No data				
Carcinogenicity	No evidence of carcinogenic properties				
Mutagenicity	No evidence of mutagenic or teratogenic effects				
Exposure Limits	OES, mg/m ³ 0.7 Br (long-term, 8-hour TWA)				

13. **Disposal Considerations**
Dispose of in accordance with local authority requirements or pass to a chemical disposal company.

14. **Transportation Information**

Hazard Class	8				
UN No.	1744				
Packing group	I				

15. **Regulatory Information**

Symbol	Corrosive				
Risk Phrases	R: 26-35				
Safety Phrases	S: 07/09-26-45				

16. Other Information

All information, recommendations and suggestions herein concerning the above product are based upon data believed to be reliable, however, it is the users responsibility to determine the safety, toxicity, and suitability for his/her own use of the product described herein. The information herein should not be construed as being absolutely complete since additional information may be necessary or desirable when special or exceptional circumstances exist or because of applicable laws or regulations.

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Rev Date 01.08.07