



# SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

## Bromine

### Section 1: Identification of the substance/ mixture and of the company/ undertaking.

#### 1.1 Product identifier

Product name	Bromine
Other names	
CAS No.	7726-95-6
Index No.	035-001-00-5
EC No.	231-778-1
Product code	8002544

#### 1.2 Relevant identified uses of the substances or mixture and uses advised against

Product use	Laboratory chemicals, manufacture of substances, Scientific R&D
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#### 1.3 Details of the supplier of the safety data sheet

Company	Breckland Scientific Supplies Ltd	
Address	Antom Court, Tollgate Drive, Stafford, ST16 3AF	
Web	www.brecklandscientific.co.uk	
Telephone	01785 227 227	
Fax	01785 227 444	
Email	msds@brecklandscientific.co.uk	
Emergency telephone	08:30-17:00 24hrs	01785 227227 112

### Section 2: Hazards identification

#### 2.1 Classification of the substance or mixture

2.1.1 Classification - 67/548/EEC	C; R35 Skin Corr. 1A Corrosive T; R23 (vapour) Acute Tox. 2 Toxic N; R50 Aquatic. Acute 1 Dangerous for the environment
2.1.2 Classification – EC 1272/2008	H314 H330 H400

#### 2.2 Label elements

Hazard Pictograms	
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Signal word	Danger
Hazard statement	H314: Causes severe skin burns and eye damage. H330: Fatal if inhaled. H400: Very toxic to aquatic life.
Precautionary statement	P260: Do not breathe fumes or vapours. P273: P280: Wear protective gloves/ protective clothing/ eye protection/ face protection. P284: Wear respiratory protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTRE or doctor/physician.

### Section 3: Composition/information on ingredients

#### 3.1 Substances

67/548/EEC/1999/45/EC

Chemical name	Index No.	CAS No.	EINECS No.	Classification	Conc
Bromine	035-001-00-5	7726-95-6	231-778-1	H314 H330 H400	0.2M

EC 1272/2008

Chemical name	Index No.	CAS No.	EINECS No.	Classification	Conc
Bromine	035-001-00-5	7726-95-6	231-778-1	C; R35 Skin Corr. 1A Corrosive T; R23 (vapour) Acute Tox. 2 Toxic N; R50 Aquatic. Acute 1 Dangerous for the environment	0.2M

### Section 4: First aid measures

#### 4.1 Description of first aid measures

Inhalation:	Move the exposed person to fresh air. If breathing stops, provide artificial respiration.
Eye contact:	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention.
Skin contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash off immediately with plenty of soap and water. Seek medical attention if irritation or symptoms persist.

Ingestion:	DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly. Seek medical attention.
General information:	If you feel unwell, seek medical advice (show the label where possible).

### Section 5: Firefighting measures

5.1 Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
5.2 Special hazards arising from substances or mixture	No data available
5.3 Advice for firefighters	Wear suitable respiratory equipment when necessary

### Section 6: Accidental release measures

6.1 Personal precaution, protective equipment and emergency procedures	Wear suitable protective clothing. Avoid breathing vapours, mist or gas. Avoid formation of dust. Ensure adequate ventilation of the working area. Evacuate personnel to a safe area.
6.2 Environmental precautions	Prevent further spillage if safe. Do not allow product to enter drains
6.3 Methods and materials for containments and cleaning up	Avoid raising dust. Sweep up. Transfer to suitable, labelled containers for disposal.

### Section 7: Handling and storage

7.1 Precautions for safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust. Ensure adequate ventilation of the working area.
7.2 Conditions for safe storage including any incompatibilities.	Store in a cool, dry area. Keep container tightly closed.

### Section 8: Exposure controls/ personal protection

#### 8.1 Control parameters

##### 8.1.1 Exposure limit values

Bromine CAS No: 7726-95-6	Long Term (8hr TWA)	Short term (15min period STEL)
ppm	0.2	0.1

Mg/m <sup>3</sup>	1.3	0.66
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## 8.2 Exposure controls

Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the working day. Ensure adequate ventilation of the working area.
Eye/ face protection	Approved safety glasses. Face shield where appropriate.
Skin/ hand protection	Wear suitable protective clothing and gloves.
Respiratory protection	Where risk assessment shows it is necessary, use a dust mask type or breathing apparatus.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

State:	Liquid
Colour:	Brown
Melting point °C:	7.2
Boiling point °C:	58.8
Relative density g/cm <sup>3</sup> :	3.119
Chemical formula:	Br <sub>2</sub>
Molecular weight g/mol:	159.81

## Section 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	No data available

## Section 11: Toxicological information

### 11.1 Information on toxicological effects:

Acute toxicity	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available

## 11.4 Toxicological information

Bromine	Oral Rat LD50 mg/kg: 2600
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## Section 12: Ecological information

## 12.1 Toxicity

Toxicity to daphnia and other aquatic vertebrates

Bromine	EC50 Daphnia magna: 1 (Water flea) mg/l - 48hr
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## Section 13: Disposal considerations

General information	Dispose of in compliance with all local and national regulations.
Disposal methods	Contact a licensed waste disposal company. Dispose of this material and its container to hazardous or special waste collection point

## Section 14: Transport information

ARD/RID

14.1. UN Number:

ADR/RID: 1744

IMDG: 1744

IATA: 1744

14.2 UN Proper shipping name: Bromine

14.3. Transport hazard class(es): 3

14.4. Packing group:

14.5 Environmental hazards:

ADR/RID: yes

IMDG Marine pollutant: no

IATA: yes

## Section 15: Regulatory information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

Regulations	Labelling according to Regulation (EC) No 1272/2008.
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## Section 16: Other information

### 16.1: Other information

Text of risk phrases in Section 3

C; R35 Skin Corr. 1A Corrosive	Causes severe skin burns and eye damage.
T; R23 (vapour) Acute Tox. 2 Toxic	Fatal if inhaled.
N; R50 Aquatic. Acute 1	Very toxic to aquatic life.
Dangerous for the environment	

Text of hazard statements in Section 3

H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.

### 16.2 Further information

Further information	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. Breckland Scientific Supplies Limited will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.
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