

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking**1.1 Product Identifier** Bromine Tablets**1.2 Relevant Identified uses of the substance or mixture and uses advised against**

Uses: For disinfection of pool and spa water.

1.3 Details of the supplier of the safety data sheetCompany: SCP UNITED KINGDOM
1 Church Heath, Crawley
West Sussex, RH11 0PQ
UNITED KINGDOM

Telephone: +44 1293 546126

1.4 Emergency Telephone

Tel: +44 (0) 8712 229081 (office hours) +44 (0) 1242 300271 (outside of office hours)

2. Hazard Identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008****Hazard Class****Hazard Statements**

Ox. Sol.2

H272

Skin Irrit.2

H315

Eye Irrit.2

H319

STOTSE 3

H335

Aquatic Acute 1

H400

Acute Tox. 4 *

H302

EUH031

For the full text of the H statements mentioned in this section see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC**Hazard Symbol/Category of danger****Risk phrases**

Harmful

R22

Irritant

R31

R36/37

Dangerous for the environment

R50/53

For the full text of the R phrases mentioned in this section see Section 16.

Most important adverse effects

Human Health:

See section 11 for toxicological information.

Physical & Chemical Hazards:

See section 9 for toxicological information.

Potential environmental effects:

See section 12 for toxicological information.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols:



Signal word: Danger

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2. Hazard Identification...cont

Hazard statements:

H272	May intensify fire; oxidiser
H314	Harmful if swallowed.
H400	Causes skin irritation
H410	Causes serious eye irritation
H302	May cause respiratory irritation
H317	Very toxic to aquatic life.
EUH031	Contact with acid liberates toxic gas

Warning! Do not use together with other products. May release dangerous gases (chlorine)

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use.
P210	Keep away from heat. - No smoking
P221	Take any precaution to avoid mixing with combustibles
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water / shower
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician
P405	Store locked up.

Hazardous components which must be listed on the label

Bromochloro-5,5-dimethylimidazolidine-2,4-dione

2.3 Other Hazards

Use biocides safely. Always read the label and product information before use.

Marine pollutant

3. Composition/information on ingredients

3.1 Substances

Chemical nature:	Granules		
Chemical Name	Bromochloro-5,5-dimethylimidazolidine-2,4-dione		
CAS No	EC No	%	H & S
32718-18-6	251-171-5	98%	H272,H302,H315,H319,H335,H400

4. First Aid measures

4.1 Description of first aid measures

General Advice:	Take off all contaminated clothing immediately.
If inhaled:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation. If breathing stops, provide artificial respiration.
In case of skin contact:	At first remove dust mechanically. Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin is damaged or if irritation persists seek medical attention
In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Call a doctor immediately
If swallowed:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician

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4. First Aid measures continued

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	See Section 11 for more detailed information
Effects:	See Section 11 for more detailed information

4.3 Indication of immediate medical attention and special treatment needed

Treatment	Symptomatic treatment (decontamination, vital functions).
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5. Fire fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:	Water Spray, Foam
Unsuitable extinguishing media:	ABC powder

5.2 Special hazards arising from the substance or mixture

Specific Hazards during fire fighting:	In case of fire, the following can be released: Hydrogen chloride (HCl) Nitrogen oxides (NOx)
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5.3 Advice for fire-fighters

Special protective equipment	Do not inhale explosion gases or combustion gases. Wear fully protective suit.
Further Information:	Cool endangered receptacles with water spray Collect contaminated fire extinguishing water separately.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Use personal protective equipment. Keep people away from and upwind of spill. Provide adequate ventilation. Avoid raising dust..
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6.2 Environmental precautions

Environmental precautions:	Avoid release to the environment Do not allow to enter public sewers and watercourses. Inform appropriate authorities in case of seepage into water course or sewage system.
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6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up:	Collect as much as possible in clean container for re-use or disposal. Do not absorb spillage in sawdust or other combustible material.
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Further Information:	Dispose of contaminated material as waste according to item 13.
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6.4 Reference to other sections

See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment
See Section 13 for disposal information

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Strong oxidising agent. DO NOT MIX WITH OTHER CHEMICALS. Mix only with water. Never add water to product. Always add product to water. Use clean dry dispensing equipment. Avoid contact with skin and eyes
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Hygiene measures:	Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the work day. Take off all contaminated clothing immediately. Provide adequate ventilation.
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7. Handling and storage

7.2 Conditions for safe storage, including any incompatibilities.

Storage :	Keep this product in original, sealed container when not in use. Store in a cool, dry, well-ventilated area.
Fire and explosion:	Substance/product is oxidizing when dry. Keep respiratory protective device available.
Further information :	Do not seal receptacle gas tight. Store only in original containers.
Storage Temperature:	5 °C up to 35 °C.
Common storage:	Do not store together with reducing agents, heavy-metal compounds, acids and alkalis. Store away from flammable substances.

7.3 Specific end uses

Specific use(s)	No information is available.
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8. Exposure control/personal protection

8.1 Control parameters

Regulatory List:	EH40 (8 hour TWA)	EH40 (15 min TWA)
Value:	1.5 mg/m ³	2.9 mg/m ³

8.2 Exposure controls

Engineering measures Fume cupboard required when vapours/aerosol are generated.

Personal protective equipment

Respiratory protection	If vapours or aerosols occur wear suitable respiratory device. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Hand protection	Protective Gloves The glove material has to be impermeable to the product/the substance/preparation.

Material: Nitrile rubber, NBR
Thickness: ≥ 0.6 mm
Breakthrough: ≥ 8 h

Eye protection Tightly fitting safety goggles.

Skin and body protection Plastic apron, sleeves, boots-if handling large quantities

Environmental exposure controls

General advice: General room ventilation plus local exhaust should be used to maintain exposure below TLV. Eyewash and emergency shower facilities recommended. Remove and wash contaminated clothing before reuse.
Local authorities should be advised if significant spillages cannot be contained

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Solid
Colour:	Yellowish
Odour:	Characteristic
Odour Threshold:	No information
pH @ 20°C:	(1 g/l) at 20°C: 3.5
Melting Point	158 - 162°C
Boiling point/boiling range:	Not determined
Flash point:	Not applicable
Flammability (solid, gas)	Contact with combustible material may cause fire.
Danger of explosion	Product does not present an explosion hazard.
Density @ 20°C:	1.8 - 2.0 g/cm ³

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Trade Name: Bromine Tablets

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Water solubility: Soluble
Organic Solvents 0.00%
VOC (EC) 0.00%
Solids content 100%
Oxidising properties: Oxidizer - may intensify fire

9.2 Other Information No further information

10. Stability and reactivity

10.1 Reactivity

Reactivity Stable under recommended transport or storage conditions

10.2 Chemical stability

Chemical stability No information available

10.3 Possibility of hazardous reactions

Hazardous reactions: Contact with acids releases toxic gases.

10.4 Conditions to avoid

Conditions to avoid Damp or slightly wet conditions may slowly liberate hazardous gases. (will gradually degenerate to Nitrogen Trichloride).

10.5 Incompatible materials

Materials to avoid Avoid contact with Acids, metal, metal oxides, alloys, inflammable substances.

10.6 Hazardous decomposition products

Haz. Decomp. products: Hydrogen chloride (HCl), Chlorine, Hydrochloric Acid and Bromine

11. Toxicological Information

11.1 Information on toxicological effects

Component: Bromochloro-5-5,dimethylimidazolidine-2,4-dione

CAS No: 32718-18-6

Route	Species	Test	Value	Units
Oral	Rat	LD50	578	mg/kg

Primary Irritant effect:

On the skin: Caustic effect on skin and mucous membranes.
On the eyes: Strong caustic effect.

Sensitization: May cause sensitizing by skin contact.

Carcinogenic There is no evidence that this substance has any carcinogenic properties.
Mutagenic No information available
Teratogenicity No information available

Further information No further information available

Trade Name: Bromine Tablets

12. Ecological Information

12.1 Toxicity Acute Toxicity

Test	Species	Value	Units	Time
EC50	Onchorhynus mykiss	0.65	mg/l	96 hrs
LC50	Daphnia Magna	0.87	mg/l	48 hrs

12.2 Persistence and degradability

Persistence no data available

Biogradability The product is decomposed by hydrolysis in water or moist air.

12.3 Bioaccumulative potential

Bioaccumulative potential Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

12.4 Mobility in soil

Mobility in soil No information available

12.5 Results of PBT and PvB assessment

PBT and PvB assessment: Not applicable

12.6 Other adverse effects

Remarks: Water hazard Class 2 (German regulation)(Self assessment):hazardous for water
Do not allow product to reach ground water, water course or sewage system
Danger to drinking water if even small quantities leak into the ground.

13. Disposal Considerations

13.1 Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal is required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Empty contaminated packaging thoroughly. They can be re-cycled after thorough and Contaminated packaging: proper cleaning. Packaging that cannot be cleaned is to be disposed of in the same manner as the product

14. Transport Information

14.1 UN Number 3085

14.2 UN proper shipping name 3085 OXIDIZING SOLID, CORROSIVE, N.O.S. (Bromochloro-5,5-dimethylidene-2,4dione) ENVIRONMENTALLY HAZARDOUS

14.3 Transport hazard class(es)

Class 5.1
Classification Code OC2
Hazard label 5.1 + 8
Transport Category 3
Tunnel Code E
EMS Number: F-A,S-Q
Symbol Fish & Tree
LQ 1 kg



14.4 Packaging Group II

14.5 Environmental hazards

Environmentally Hazardous Yes
Marine Pollutant Yes

14.6 Special precautions for user Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code N/a

15. Regulatory information

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

Information about limitation of use

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

16. Other information

Full text of H-statements referred to under sections 2 and 3

H272 May intensify fire; oxidiser

H314 Causes severe skin burns and eye damage

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

EUH031 Contact with acid liberates toxic gas

Further information

Restricted to professional users. Attention - Avoid exposure- obtain special instructions before use

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

Rev 6

■ Indicates updated section.