

## 1. Identification of the substance/preparation and of the company/undertaking

**1.1 Product Identifier**  
 Chemical Bromine Tablets  
 Weight 5 kg  
 Part No. SFBT05/4

### 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 sheet

Company: Complete Pool Controls Ltd  
 Unit 2, The Park  
 Stoke Orchard  
 Bishops Cleeve  
 Gloucestershire  
 GL52 7RS

Telephone: +44 (0) 8712 229081 Fax: +44 (0) 8712 229083  
 E-mail: [sales@cpc-chemicals.co.uk](mailto:sales@cpc-chemicals.co.uk)

### 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 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

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

(continued on Page 2)

**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		
<b>CAS No</b>	<b>EC No</b>	<b>%</b>	<b>H &amp; S</b>
32718-18-6	251-171-5	98%	H272,H302,H315,H319,H335,H400 R8,R22,R31, R36/37/38, R50

**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

**4. First Aid measures continued**

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 immediately.

**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).

**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)

**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..

**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.

**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.

Further Information: Dispose of contaminated material as waste according to item 13.

**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 the skin and the eyes.

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. Avoid contact with the skin and eyes.

**7.2 Conditions for safe storage, including any incompatibilities.**

Requirements for storage areas and containers: Keep this product in original, sealed container when not in use. Store in a cool, dry, well-ventilated area.

Advice on protection against fire: Substance/product is oxidizing when dry. Keep respiratory protective device available.

Further information on storage Do not seal receptacle gas tight. Store only in original containers.

Storage Temperature: 5 °C up to 35 °C.

Advice on 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.

**8. Exposure control/personal protection**

**8.1 Control parameters**

Regulatory Basis: EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.

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

**8.2 Exposure controls**

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

**Personal protective equipment**

Respiratory protection Advice: 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

Hand protection Advice: Protective Gloves  
The glove material has to be impermeable to the product/the

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

Eye protection Advice: Tightly fitting safety goggles.

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

**Trade Name:** Bromine Tablets

## 8. Exposure control/personal protection

### 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:	Currently we do not have any information from our supplier about this.
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 <sup>3</sup>
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

Advice: Stable under recommended transport or storage conditions

### 10.2 Chemical stability

Advice: Currently we do not have any information from our supplier about this.

### 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

Hazardous decomposition products: Hydrogen chloride (HCl), Chlorine, Hydrochloric Acid and Bromine

**Trade Name:** Bromine Tablets

## 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

## 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** Remarks: no data available

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

### 12.3 Bioaccumulative potential

Remarks: Due to the distribution coefficient n-octanol/water an accumulation in organisms is not

### 12.4 Mobility in soil

Remarks: Currently we do not have any information from our supplier about this.

### 12.5 Results of PBT and PvB

Remarks: 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.

**Contaminated packaging:**

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

## 14. Transport Information

<b>14.1 UN Number</b>	3085			
<b>14.2 UN proper shipping name</b>	3085 OXIDIZING SOLID, CORROSIVE, N.O.S. (Bromochloro-5,5-dimethylidene-2,4dione) ENVIRONMENTALLY HAZARDOUS			
<b>14.3 Transport hazard class(es)</b>				
Class	5.1 + 8			
Classification Code	OC2			
Hazard label	58			
Transport Category	3			
Tunnel Code	E			
EMS Number:	F-A,S-Q			
Symbol	Fish & Tree			
LQ	5 kg			
<b>14.4 Packaging Group</b>	III			
<b>14.5 Environmental hazards</b>				
Environmentally Hazardous	Yes			
Marine Pollutant	Yes			
<b>14.6 Special precautions for user</b>	Not applicable			
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	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 R-phrases referred to under sections 2 and 3

R22 Harmful if swallowed

R31 Contact with acids liberates toxic gas

R35 Causes severe burns

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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

**16. Other information**

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed
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R35	Causes severe burns
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
EUH031	Contact with acid liberates toxic gas

**Further information**

S1/2	Keep locked up and out of reach of children
S8	Keep container dry
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S41	In case of fire and/or explosion do not breathe fumes
S60	This material and/or its container must be disposed of as hazardous waste
S61	Avoid release to the environment. Refer to special instructions / Safety Data Sheet

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 at this time. 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.

**• Abbreviations and acronyms:**

ADR:	Accord europeen sur le transport des marchandises dangereuse par Route (European Agreement concerning
RID:	Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR	Dangerous goods Regulations by the 'International Air Transport Association' (IATA)
ICAO:	International Civil Aviation Organization
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS	European Inventory of Existing Commercial Chemical Substances.
CAS:	Chemicals Abstracts Service (division of the American Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

Rev	Date	By	Amendment
1	27/08/2008	Linda Brueford	
2	23/032009	Linda Brueford	Sections 2 & 3 swapped
3	13/07/2011	Linda Brueford	GHS label elements added and other minor editorial amendments
4	14/09/2012	Linda Brueford	UN NO & Class amended. Updated to latest legislations and other minor editorial amendments
5	25/09/2013	Linda Brueford	Minor editorial amendments
6	06/11/2013	Chemregs	Sections 2 & 3 revised for classification