
SAFETY DATA SHEET

1 Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Product Name: **Bromine Granules**
Datasheet Number: Bromine Granules 5. 0. 0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Pool / spa treatment

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Complete Pool Controls Ltd
Address of Supplier: Unit 2, The Park
Stoke Orchard
Bishops Cleeve
Gloucestershire GL52 7RS
UK
Telephone: +44 (0) 8712 229081
Fax: +44 (0) 8712 229083
Responsible Person: Sales Dpt
Email: sales@cpc-chemicals.co.uk

1.4 Emergency telephone number

+44 (0) 8712 229081 (09:00 - 17:00)
+44 (0) 1242 300271

2 Hazards identification**2.1 Classification of the substance or mixture**

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Acute Tox. 4, H302
- Eye Irrit. 2, H319
- STOT SE 3, H335
- Aquatic Acute 1, H400
- Aquatic Chronic 1, H410
- EUH031
- Classification (67/548/EEC, 1999/45/EC)
- Xn; R22
- Xi; R36/37
- R31
- N; R50/53

2.2 Label elements

- Signal Word: Warning
- Symbols: GHS07, GHS09

Hazard phrases

- Harmful if swallowed.

2 Hazards identification (....)

- Causes serious eye irritation.
- May cause respiratory irritation.
- Very toxic to aquatic life with long lasting effects.
- Contact with acids liberates toxic gas.
- Warning! Do not use together with other products. May release dangerous gases (chlorine).

Precautionary Phrases

- Store locked up.
- Keep out of reach of children.
- Store in a dry place.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Avoid release to the environment.

2.3 Other hazards

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

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Sodium Dichloroisocyanurate Dihydrate		51580-86-0	220-767-7	H302, H319, H335, H400, H410, R22, R31, R36/37, R50/53	GHS07, GHS09, Xn, N
Sodium bromide		7647-15-6	231-599-9		

*See Section 16

4 First aid measures

4.1 Description of first aid measures

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Get medical advice/attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If skin irritation occurs: Get medical advice/attention.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Do NOT induce vomiting.
- Wash contaminated clothing before reuse.

4.2 Most important symptoms and effects, both acute and delayed

- Can cause damage to the eyes
- May cause irritation

4.3 Indication of immediate medical attention and special treatment needed

- Treat symptomatically

5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use water fog for extinction

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include nitrogen and carbon oxides
- Decomposition products include oxygen
- Decomposition products include chlorine.
- See Section 10.6

5.3 Advice for firefighters

- Wear protective clothing as per section 8
 - Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
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6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8
- Evacuate the area and keep personnel upwind
- Avoid raising dust
- Avoid breathing dust/fume/gas/mist/vapours/spray.

6.2 Environmental Precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Sweep or shovel-up spillage and remove to a safe place
- Prevent formation of dust
- Do not absorb spillage in sawdust or other combustible material
- Neutralise with Soda ash
- Dilute with a large volume of water
- Flush spill area with copious amounts of water
- Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

- See Section 7 & 8
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7 Handling and storage

7.1 Precautions for safe handling

- Do not mix with any other products
- Avoid contact with combustible material
- Never add water to this product
- Always add product to water
- Ensure adequate ventilation
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

- Store away from other materials.
 - Store in a well-ventilated place. Keep cool.
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7 Handling and storage (....)

- Store in a dry place.
- Keep only in original container.
- Protect from moisture.
- Keep away from foodstuff.
- Keep away from acid.

7.3 Specific end use(s)

- No information available.

8 Exposure controls/personal protection

8.1 Control parameters

- None assigned

8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations as low as practicable

Occupational exposure controls

- In case of inadequate ventilation wear respiratory protection.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard EN 166.
- Wear apron or other light protective clothing
- Keep working clothes separately and do not take them home



Respirator



Goggles



Gloves



Suit

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: chlorine
- Appearance: Solid, white, granules
- pH 7 at 10 % concentration
- Boiling point - not applicable
- Vapour pressure - not applicable
- Vapour density - not known
- Melting point - not known
- Water solubility 260 g/l
- Specific gravity - not known
- Flash point - not known
- Non-explosive
- Contact with other material may cause fire
- Partition coefficient : n-Octanol/water - not known
- Evaporation rate - not known
- Viscosity - not applicable

9.2 Other information

- No information available

10 Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

- No information available

10.3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas.
- Reacts with metals liberating hydrogen
- Exothermic reaction with water

10.4 Conditions to avoid

- Keep away from heat and sources of ignition
- Protect from moisture.
- Keep container tightly closed.

10.5 Incompatible materials

- Incompatible with acid
- Reacts with acids to produce free chlorine.
- Incompatible with reducing agents
- Incompatible with combustible material
- Incompatible with organics
- Incompatible with oxidizing substances

10.6 Hazardous Decomposition Products

- Decomposition products include chlorine.
 - Decomposition products may include hydrogen chloride
 - Decomposition products may include carbon oxides
 - Decomposition products may include nitrogen oxides
 - Decomposition products may include nitrogen trichloride
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11 Toxicological information

11.1 Information on toxicological effects

- LD50 (oral, rat) >1400 mg/kg
- LDLo (human) 3570 mg/kg

Inhalation

- May cause respiratory tract irritation.
- May cause shortness of breath
- May cause headache
- May cause delayed pulmonary oedema

Contact with skin

- Causes irritation
- In cases of severe exposure, dermatitis may develop

Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

Ingestion

- Harmful if swallowed.
 - Can cause damage to the digestive system
 - May cause nausea/vomiting
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11 Toxicological information (....)

- May cause unconsciousness

Carcinogenicity

- No information available

Teratogenicity

- No information available

Mutagenicity

- No information available
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12 Ecological information

12 .1 Toxicity

- Very toxic to aquatic life with long lasting effects.

12 .2 Persistence and degradability

- No information available

12 .3 Bioaccumulation Potential

- No bioaccumulation potential

12 .4 Mobility in soil

- Completely soluble in water
- High mobility in soil

12 .5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

12 .6 Other Adverse Effects

- Do not allow product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized. Danger to drinking water if even extremely small quantities leak into the ground.
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13 Disposal considerations

13 .1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- This material and/or its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning

Classification

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.
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14 Transport information



Dangerous Substance Marine Pollutant

14.1 UN Number
3077

14.2 UN Proper Shipping Name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S.
(SODIUM DICHLOROISOCYANURATE DIHYDRATE)

14.3 Transport hazard class(es)

14.4 Packing group
III

14.5 Environmental hazards
- Marine pollutant

14.6 Special precautions for user
- See Section 7

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
- Not applicable

Other information

Road/Rail (ADR/RID)

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (SODIUM DICHLOROISOCYANURATE DIHYDRATE)		
ADR UN No.:	3077		
ADR Hazard Class:	9	ADR Packing Group:	III
Tunnel Code:	E		

Sea (IMDG)

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (SODIUM DICHLOROISOCYANURATE DIHYDRATE)		
IMDG UN No.:	3077		
IMDG Hazard Class.:	9	IMDG Pack Group.:	III

Air (ICAO/IATA)

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (SODIUM DICHLOROISOCYANURATE DIHYDRATE)		
ICAO Un No.:	3077		
ICAO Hazard Class.:	9	ICAO Packing Group.:	III

15 Regulatory information

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

- This Safety Data Sheet is provided in compliance with REACH Regulation (EC) No 1907/2006

15.2 Chemical Safety Assessment

No information available

16 Other information

Revisions

1. 27/08/2008 by Linda Brueford.
2. 23/03/2009 by Linda Brueford. Sections 2 & 3 swapped
3. 13/07/2011 by Linda Brueford. GHS label elements added & other minor editorial amendments
4. 22/12/2011 by Linda Brueford. UN No added & Class 9 for transport
5. September 2013 by ChemRegs. Precautionary Statements revised

Text of R and S phrase codes used in this safety data sheet:- H302: Harmful if swallowed.; H319: Causes serious eye irritation.; H335: May cause respiratory irritation.; H400: Very toxic to aquatic life.; H410: Very toxic to aquatic life with long lasting effects.; R22: Harmful if swallowed; R31: Contact with acids liberates toxic gas; R36/37: Irritating to eyes and respiratory system; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.