SAFETY DATA SHEET

Deep Blue Pro - SHOCK Chlorine Granules

1.1 Product Identifier

Trade Name: Deep Blue Pro - SHOCK Chlorine Granules

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: Deep Blue Pool Supplies
Box 8899 Hermitage,
Corsham, SN13 8DT
Telephone: +44 (0) 3330 907094
Fax: +44 (0) 3330 907094
E-mail: help@deepbluepoolsupplies.co.uk

1.4 Emergency Telephone

Tel: +44 (0) 3330 907094 (office hours)
Tel: 111 (Out of hours)

2. Hazard Identification

2.1Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Hazard Class	Hazard Statements
Acute Tox. 4 *	H302
Eye Irrit. 2	H319
STOT SE 3	H335
STOT SE 3	H400
Aquatic Acute 1	H410
Aquatic Chronic 1	

For the full text of the H statements 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 physicochemical information
Potential environmental effects:	See section 12 for environmental information

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Hazard symbols:

GHS07 GHS09

Signal word: Warning

Hazard statements:	H302	Harmful if swallowed.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H410	Very toxic to aquatic life with long lasting effects.
	EUH031	Contact with acid liberates toxic gas

EUH026 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
P280 Wear protective gloves/protective clothing/eye protection/face protection. P402 Store in a dry place.
P260 Do not breathe dust
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P405 Store locked up
IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses P305+351+338:
if present and easy to do – continue rinsing
P273 Avoid release to the environment
P501 Dispose of contents/container in accordance with legislation

Hazardous components which must be listed on the label :

Sodium Dichloroisocyanurate Dihydrate

2.3 Other Hazards
PBT / vPvB: Not applicable

3. Composition/information on ingredients

3.1 Substances

Chemical nature: Granules

Chemical Name: Sodium Dichloroisocyanurate Dihydrate

CAS No	EC No	%	H & S
51580-86-0	220-767-7	>85%	H302, H319, H335,H400,H410

4. First Aid measures

4.1 Description of first aid measures:

General Advice: Take off all contaminated clothing immediately.

If inhaled:

Move to fresh air. Remove contaminated clothing and loosen remaining clothing. Keep at rest until fully recovered. If breathing is laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a facemask. if breathing has stopped apply artificial respiration at once. In event of cardiac arrest, apply external cardiac massage. Seek medical advice. In severe cases pulmonary oedema can be delayed by up to 48 hours.

In case of skin contact: 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 continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Get medical attention.

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 & Effects: No further information available.

4.3 Indication of immediate medical attention and special treatment needed:

Treatment Treat Symptomatically.

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Water spray or fog (large quantities available)

Unsuitable media: No information available

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Oxidising agent. Not combustible, but will support combustion of other materials.

Decomposes upon heating liberating chlorine and oxygen. Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire.

5.3 Advice for fire-fighters:

Protective equipment:

Fire-fighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Thoroughly decontaminate fire-fighting equipment including all fire fighters wearing apparel after the incident.

Further Information: 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. Provide adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions:

Environmental precautions: Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Inform respective authorities about pollution to water sources.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up:

Cleaning up:

Sweep up, avoiding generation of dust, then immediately spread as a thin layer in an uncontaminated, dry open area, to avoid the possibility of hot spots forming. Gradually hose to drain ensuring large dilution. DO NOT store or transport swept up material. DO NOT return spilled material to original container. Do not add small amount of water to material. Where a spill has occurred in a confined space or an unventilated building and the material is damp and evolving chlorine, the rate of chlorine evolution can be reduced by covering the thinly spread solid with soda ash. For large spills notify Emergency Services.

6.4 Reference to other sections

For personal protection see section 8

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.

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.

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 place.

Protection against fire: Normal measures for preventive fire protection

Further information: Keep away from children

Common storage: Keep away from food, drink and animal feeding stuffs. Keep away from combustible material

7.3 Specific end uses

Specific use(s) No information is available.

8. Exposure control/personal protection

8.1 Control parameters:

EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical.

Sodium Dichloroisocyanurate Dihydrate		
State	8 hour TWA	15 min STEL
UK	1.5 mg/m^3	2.9 mg/m^3

8.2 Exposure controls

Engineering measures: Fume cupboard required when vapours/aerosol are generated. Refer to protective measures listed in sections 7 and 8.

Personal protective equipment:

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device Filter AB2P2. Filter AB2P3. In case of intensive or longer exposure use self- contained respiratory protective device

Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive Hand protection:

89/686/EEC and standard EN 374.

Eye protection: Wear safety glasses approved to standard EN 166.

Skin and body protection: Wear appropriate clothing to prevent repeated or prolonged skin contact

Environmental exposure controls: Dispose of in accordance with all applicable local and national regulations.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Granules
Colour:	Whitish
Odour:	Characteristic chlorine
pH @ 20^{o}C:	7.0 - 10% (aqueous solution)
Melting Point	Not Applicable
Boiling point/boiling range:	Not Applicable
Water solubility:	260 gm/litre @25 ^{O}C
Partition coeffcient:n-octanol/water:	No data available
Explosive properties:	Product is not explosive.
Oxidising properties:	No data available

9.2 Other Information No further information

10. Stability and reactivity

10.1 Reactivity:

Reactivity: No information available

10.2 Chemical stability:

Chemical stability: No information available

10.3 Possibility of hazardous reactions:

Hazardous reactions: Gives off hydrogen by reaction with metals. Reacts exothermic with water.

10.4 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 water on concentrated material in the container. Avoid contact with easily oxidisable material e,g organic compounds, reducing agents, Nitrogen containing.

10.6 Hazardous decomposition products

Decomposes above 240°C forming chlorine, nitrogen, trichloride, nitrogen oxides, carbon

Haz. Decomp. products: dioxide, cyanates and carbon monoxides.

11. Toxicological Information

11.1 Information on toxilogical effects

Toxicity Values: Sodium Dichloroisocyanurate Dihydrate,

Route	Species	Test	Value	Units
Oral	Rat	LD50	>1,400	mg/kg
Oral	Human	LD50	3,570	mg/kg

(lowest lethal dose)

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, ulceration of the stomach, lachrymation, difficulty in breathing, loss of consciousness, coma and possible death.

Inhalation: Inhalation of the dust will result in respiratory irritation. Decomposes when wet to evolve chlorine gas. Inhalation of chlorine will result in severe respiratory irritation. Delayed effects can include shortness of breath, severe headache, pulmonary oedema and pneumonia.

Skin: Contact with the skin will result in mild irritation. Repeat or prolonged skin contact may lead to allergic contact dermatitis.

Eyes: A severe eye irritant. Contamination of the eyes can result in permanent injury. Corrosive to eyes; contact can cause corneal burns.

Sensitisation: No further information available

Further information No further information available

12. Ecological Information

12.1 Toxicity:

Acute Toxicity:

Highly toxic to aquatic life: DO NOT discharge into lakes, ponds or streams. DO NOT discharge into public waters unless in accordance with consent to discharge orders.

Species	Time	Test	Value	Units
Fish	96H	LC50	1,000	Mg/L
Daphna magna	48h	LC50	1,000	Mg/L

12.2 Persistence and degradability:

Persistence and degradability: No data available

12.3 Bioaccumlative potential:

Bioaccumlative potential: Not expected to bioaccumulate

12.4 Mobility in soil:

Mobility in soil: Soluble in water, predicted to have high mobility in soil.

12.5 Results of PBT and PvB assessment:

PBT and PvB assessment No data available

12.6 Other adverse effects:

Remarks: Harmful effects to aquatic organisms due to pH shift

Neutralization is necessary before waste water is discharged into water treatment plants.

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

Waste Catalogue No:

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport Information

14.1 UN Number 3077

14.2 UN proper shipping name

3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (SODIUM DICHLOROISOCYANURATE DIHYDRATE)

14.3 Transport hazard class(es)

Class	9
Classification Code	M7
Hazard label	90
Transport Category	3

14.4 Packaging Group III

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 CodeN/a

15. Regulatory information

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

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

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

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.
EUH031	Contact with acids liberates toxic gas.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).

Recommended for 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.