Revision 12/12/16

SAFETY DATA SHEET

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

**1.1 Product Identifier**
Trade Name: 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: 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

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 Category | Target Organs | 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 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: Warning

Hazard statements:
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 acid liberates toxic gas

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

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## 2. Hazard Identification…cont

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 |
| P305+351+338: | IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses 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 | 100% | 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 fighting 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
If the product contaminates rivers and lakes or drains inform respective authorities
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.

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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- |
| 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 |

**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 |
| Hand protection | Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 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 $^{\circ}$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**

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 such as organic compounds, reducing agents, Nitrogen

**10.6 Hazardous decomposition products**

Haz. Decomp. products: Decomposes above 240°C forming chlorine, nitrogen, trichloride, nitrogen oxides, carbon dioxide, cyanates and carbon monoxides.

## 11. Toxilogical Information

**11.1 Information on toxilogical effects**

**Toxicity Values**

| 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

| 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. Ecological Information

**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 |
| 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 |
| Tunnel Code | E |

**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 Code** N/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**
Currently we do no have any information from our supplier about this.

## 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. |

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 7**
**Indicates updated section.**