

**Granular Shock**

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

**1.1 Product Identifier**

Trade Name: Granular Shock

**1.2 Relevant Identified uses of the substance or mixture and uses advised against**

Uses: Disinfection of Swimming Pool 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) 3712 229084 (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
Acute Tox. 4 *	H302
Skin Corr. 1B	H314
Aquatic Acute 1	H400

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:



Signal word: Danger

Hazard statements:

H272	May intensify fire; oxidiser
H314:	Causes severe skin burns and eye damage
H400:	Very toxic to aquatic life
H302:	Harmful if swallowed.
H335+H336:	May cause respiratory irritation. May cause drowsiness or dizziness
EUH031:	Contact with acids liberates toxic gas.
EUH2026:	Warning! Do not use together with other products. May release dangerous gases (chlorine)

**Precautionary statements:**

P102	Keep out of reach of children
P305+351+338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P280	Wear protective gloves/protective clothing/eye protection/face protection
P309+P310	IF exposed or If you feel unwell : Call a POISON CENTER or doctor/physician.
P405	Store locked up
P501	Dispose of contents/container in accordance with national regulations.

Trade Name: Granular Shock

## 2. Hazard Identification

Hazardous components which must be listed on the label Calcium Hypochlorite

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

## 3. Composition/information on ingredients

3.2 Mixtures Calcium Hypochlorite

Chemical Name	%	CAS No	ENICS No	R/H Phrases
Calcium Hypochlorite	70 - 100%	7778-54-3	231-908-7	H272, H302, H314, H400

## 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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
Get medical advice/attention

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects:

- Can cause damage to the eyes and skin
- Prolonged skin or eye contact may cause chemical burns
- In cases of severe exposure, breathing difficulty may develop

### 4.3 Indication of immediate medical attention and special treatment needed

Treatment Treat symptomatically

## 5. Fire fighting measures

### 5.1 Extinguishing media:

- In case of fire: use carbon dioxide for extinction
- DO NOT USE dry extinguishers containing ammonium compounds such as dry powder

### 5.2 Special hazards arising from the substance or mixture

Calcium Hypochlorite is both a strong oxidiser and is chemically reactive with many substances. Strong oxidisers are capable of intensifying a fire once started; because of this any contamination of the product with other substances by spill or otherwise should be avoided.

- Gives off irritating or toxic fumes (or gases) in a fire.
- Exposure to decomposition products may be a hazard to health
- See Section 10.6

### 5.3 Advice for fire-fighters

- Wear protective clothing as per section 8
- Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit
- In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion

## 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 contact with combustible material

### 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 materials for containment and cleaning up

- Place in appropriate container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- Do not absorb spillage in sawdust or other combustible material
- Ventilate the area and wash spill site after material pick-up is complete

### 6.4 Reference to other sections

See Section 1 for emergency contact information  
See Section 7 & 8 for information on Personal protective equipment  
See section 13 for waste treatment information

## 7. Handling and storage

### 7.1 Precautions for safe handling

- Do not mix with any other products
- Ensure adequate ventilation
- Avoid contact with skin and eyes.
- 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.
- Keep only in original container
- Store in a dry place and protect from moisture.
- Store in a well-ventilated place. Keep cool.
- Do not store above 35 °C
- Keep away from foodstuff.
- Keep away from acid and reducing agents

### 7.3 Specific end uses

- No information available

## 8. Exposure control/personal protection

### 8.1 Control parameters

Calcium hypochlorite - WEL (short term) 2 mg/m<sup>3</sup>

### 8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

#### Personal protective equipment

- 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

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance: white, granules
- Odour: chlorine
- pH 12 at 1 % concentration
- Boiling point - not known
- Vapour pressure - not applicable
- Vapour density - not applicable
- Melting point 180° C with decomposition
- Water solubility 217 g/l at 27 °C
- Specific gravity - not known
- Flash point - not known
- Strong oxidising agent
- 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

- Strong oxidising agent
- Use with other products may release Chlorine

### 10.2 Chemical stability

- Decomposes above 180 °C

### 10.3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas
- Exothermic reaction on heating

### 10.4 Conditions to avoid

- Keep away from heat and moisture
- Prevent ingress of humidity and moisture into container or package. Always close the lid after use.
- Avoid contact with combustible material
- Avoid contact with foodstuffs

### 10.5 Incompatible materials

- Reacts with acids to produce free chlorine
- Incompatible with reducing agents
- Incompatible with metals
- Incompatible with strong oxidizing substances
- Ammonia

### 10.6 Hazardous decomposition products

- Decomposition products may include acidic and toxic gases
- Decomposition products may include oxygen
- Decomposition products may include chlorine
- Decomposition products may include carbonoxides

## 11. Toxicological Information

### 11.1 Information on toxicological effects

- LD50 (oral,rat) 790 mg/kg
- Prolonged skin or eye contact may cause chemical burns
  
- Inhalation
  - May cause respiratory tract irritation.
  - Causes delayed pulmonary oedema
  
- Contact with skin
  - Causes blistering of the skin
  - Causes redness and irritation
  - Can cause damage to the mucous membranes
  
- Contact with eyes
  - Causes redness and swelling
  - Causes burning sensation
  - Can cause damage to the eyes
  
- Ingestion
  - The ingestion of significant quantities may cause burning sensation
  - The ingestion of significant quantities may cause damage to the digestive system
  
- Carcinogenicity
  - No evidence of carcinogenic effects
- Teratogenicity
  - No information available
- Mutagenicity
  - No information available

## 12. Ecological Information

### 12.1 Toxicity

- Very toxic to aquatic life
- LC50 (bluegillsunfish) 0.088mg/l (96hr)
- LC50 (rainbowtrout) 0.16mg/l (96hr)
- EC50 (Daphniamagna) 0.116mg/l (48hr)

### 12.2 Persistence and degradability

Persistence and degradability - No information available

### 12.3 Bioaccumulative potential

Partition coefficient: - No information available

### 12.4 Mobility in soil

Mobility

- This substance is poorly absorbed onto soils or sediments
- Large volumes may penetrate soil and contaminate groundwater

### 12.5 Results of PBT and PvB assessment

PBT identification: - 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.
- May cause long term adverse effects in the aquatic environment

## 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 water courses
- This material and/or its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning

**13. Disposal Considerations****13.1 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

**14. Transport Information**

Oxidising Agent



Corrosive



Marine Pollutant

<b>14.1 UN Number</b>	UN3487
<b>14.2 UN proper shipping name</b>	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE
<b>14.3 Transport hazard class(es)</b>	5.1 + 8
<b>14.4 Packaging Group</b>	II
<b>14.5 Environmental hazards</b>	Marine Pollutant
<b>14.6 Special precautions for user</b>	See Section 7
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable

**Other information**

## Road/Rail (ADR/RID)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE		
ADR UN No.:	3487		
ADR Hazard Class:	5.1(8)	ADR Packing Group:	II
Tunnel Code:	E		

## Sea (IMDG)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE		
IMDG UN No.:	3487		
IMDG Hazard Class:	5.1(8)	IMDG Packing Group:	II

## Air (ICAO/IATA)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE		
ICAO UN No.:	3487		
ICAO Hazard Class:	5.1(8)	ICAO Packing Group:	II

**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**

No data available

## 16. Other information

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

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.;

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

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█ Indicates updated section