Shock Granules

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

1.1 Product Identifier

Trade Name: Shock Granules

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

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 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 toxicilogical 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+EUH031: Harmful if swallowed. Contact with acids liberates toxic gas.
H335+H336: May cause respiratory irritation. May cause drowsiness or dizziness
EUH031 Contact with acids liberates toxic gases
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.

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

3.1 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/m3

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^{o} 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. Toxilogical Information

11.1 Information on toxilogical effects

- LD50 (oral,rat) 790 mg/kg
- Prolonged skin or eye contact may cause chemical burns

Inhalation	- May cause respiratory trac tirritation. - 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 Bioaccumlative potential

Partition coefficient: - No information available

12.4 Mobility in soil - This substance is poorly absorbed onto soils or sediments

Mobility - 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

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

Trade Name: **Shock Granules**

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

14.1 UN Number UN3487

14.2 UN proper shipping name CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE

14.3 Transport hazard class(es) 5.1 + 8

14.4 Packaging Group II

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:	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.

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.

▌Indicates updated section

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

1.1 Product Identifier Winterclear - Copper free algeacide

1.2 Relevant Identified uses of the substance or mixture and uses advised against
Uses: Treatment of algae

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 Statements**
Acute Environ	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 toxilogical 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:

Hazard statements:	H400	Very toxic to aquatic life
Precautionary statements:	P402+404:	Store in a dry place. Store in a closed container
	P305+351+338:	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
	P301+P314	IF SWALLOWED: Get medical attention if you feel unwell
	P501	Dispose of contents / container to hazardous Waste

Hazardous components which must be listed on the label N-dimethyl-2-hydroxyammonium chloride (polymer)

2.3 Other Hazards No other information is available

3. Composition/information on ingredients

3.1 Mixture
Chemical nature: Liquid
A mixture of the chemicals listed below with non-hazardous additions

Chemical Name	**CAS No**	**EC No**	**H & R Phrases**
Polyquaternaryammonium compound	25988- 97-	270-325-2	H400

4. First Aid measures

4.1 Description of first aid measures

General Advice:	Symptoms of poisoning may occur even after several hours; therefore medical observation is required for at least 48 hours after the accident.
If Inhaled:	Provide fresh air, warmth and rest, preferably in a comfortable sitting position. Get professional medical attention if any discomfort continues.
In case of skin contact:	Generally the product does not irritate the skin.
In case of eye contact:	Rinse the eye immediately with water. Continue to rinse for at least 15 minutes.
If swallowed:	Clean mouth with water and drink plenty of water. If swallowed , do not induce vomiting - seek medical advice if discomfort continues

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No further information available
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:	CO_2, powder or water spray. Fight larger fires with water spray.

5.2 Special hazards arising from the substance or mixture

Specific Hazards :	No information available

5.3 Advice for fire-fighters

Protective equipment:	In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).
Further Information:	Collect contaminated firefighting water separately Contaminated firefighting water must not enter the sewage system.

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 contact with skin and eyes. Keep away from ignition source.

6.2 Environmental precautions

Environmental precautions:	Do not flush allow to enter into surface water or sanitary sewer system. Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and materials for containment and cleaning up

Methods and materials:	Absorb with liquid binding material (sand, acid/universal binders, sawdust).
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:	Use personal protective equipment. Avoid contact with skin and eyes. DO NOT MIX with other products in their concentrated form.
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.

Storage :	Prevent any seepage into the ground
Protection against fire :	No special measures required
Further information:	Store in cool, dry conditions in well sealed receptacles
Common storage:	Store away from Oxidising substances.
Storage Temperature:	Keep away from heat and direct sunlight

7.3 Specific end uses

For treatment of algae

8. Exposure control/personal protection

8.1 Control parameters

No exposure limit established

8.2 Exposure controls

Refer to protective measures listed in sections 7 and 8

Personal protective equipment

Ventilation:	No special ventilation requirements are normally necessary for this product. However, make sure that the work environment remains clean and that dusts are minimised.
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
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	Tightly fitting safety goggles (EN166). Emergency eyewash stations must be available.
Skin and body protection	Protective work clothing
Environmental exposure controls	Do not flush into surface water or sanitary sewer systems.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Fluid
Colour:	Colourless
Odour:	Mild
pH @ 20°C:	5 - 7
Melting Point	Undetermined
Boiling point:	100°C
Flash point:	Not applicable
Density @ 20°C:	1.052 g/cm^3
Water solubility:	Fully miscible
Partition coeffcient:n-octanol/water:	Currently we do not have any information from our supplier about this.
Ignition temperature:	>250 °C
Explosive properties:	Product does not present an explosion hazard

9.2 Other Information

No further information available

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: — None known

10.4 Conditions to avoid
Conditions to avoid — No decomposition if used according to specifications

10.5 Incompatible materials
Materials to avoid — Oxidising agents

10.6 Hazardous decomposition products
Haz. Decomp. products: — Nitrogen Oxides

11. Toxilogical Information

11.1 Information on toxilogical effects

Toxicity Values

Route	Species	Test	Value	Units
Oral	Rat	LD50	>5,000	mg/kg

Primary Irritant effect:
On the skin: No irritant effect
On the eyes: No irritant effect

Sensitization: No sensitizing effects known
Carcinogenic There is no evidence that this substance has any carcinogenic properties.
Mutagenic There is no evidence that this substance is mutagenic

Additional toxicological information:
Other relevant toxicity: Avoid repeated exposure

12. Ecological Information

12.1 Toxicity
Toxicity — Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

12.2 Persistence and degradability
Persistence and degradability — No information available

12.3 Bioaccumlative potential
Bioaccumlative potential — Bioaccumulation is not expected

12.4 Mobility in soil
Mobility in soil — Expected to absorb on soil

12.5 Results of PBT and PvB :
PBT and PvB : — No information available

12.6 Other adverse effects
Danger to drinking water if even small quantities leak into the ground.
Further information: Do not allow product to reach ground water, water bodies or sewage system even in small quantities.

13. Disposal Considerations

13.1 Waste treatment methods

-Disposal should be in accordance with local, state or national legislation
-Do not reuse empty containers without commercial cleaning or reconditioning
-Do not discharge into drains or the environment ,dispose to an authorised waste collection point

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

14.1 UN Number 3082

14.2 Proper shipping name 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyquaternaryammonium compound)

14.3 Transport hazard class(es)

Class	90
Classification	M6
Hazard label	9
Transport Category	3
Tunnel Code	E
Excepted Quantities	E1
Limited Quantities	5 Litres

14.4 Packaging Group III

14.5 Environmental hazards

Classified as environmentally hazardous: Yes
Marine Pollutant

14.6 Special precautions for user

Note: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG: Not applicable

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 further information

16. Other information

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

H400	Very toxic to aquatic life

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.

Further information

Restricted to professional users. Attention - Avoid exposure- obtain special instructions before use

- **Abbreviations and acronyms:**

ADR:	Accord europeen sur le transport des marchandises dangereuse par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International Carriage of Dangerous Goods by Road)
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 Americal Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

REV 4

Indicates updated section.