Rapid Shock

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

1.1 Product Identifier

Trade Name: Rapid 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

1.4 Emergency Telephone

Tel: +44 (0) 8712 229081 (office hours) +44 (0) 3712 2290841 (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:

GHS03 GHS05 GHS07 GHS09

Signal word: Danger

Hazard Determining components of labelling: Calcium Hypochlorite

Hazard statements:

H272	May intensify fire; oxidiser
H302:	Harmful if swallowed.
H314:	Causes severe skin burns and eye damage
H400:	Very toxic to aquatic life

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
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P220	Keep away from clothing and other combustible materials.

2. Hazard Identification

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340:	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310:	Immediately call a POISON CENTER/doctor.
P370+P378:	Use for extinction: Water.
P305+351+338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P363	Wash contaminated clothing before reuse.
P370+P378:	In case of fire; Use for extinction: Water.
P391	Collect Spillage
P405	Store locked up
P501	Dispose of contents/container to special treatment scheme according to official regulations

Additional Information:

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

2.3 Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable

3. Composition/information on ingredients

3.2 Mixture

Calcium Hypochlorite

CAS No	ENICS No	Reg No	%
7778-54-3	231-908-7		50 - 100%

Hazards: Ox. Sol. 2, H272; Skin Corr. 1B, H314; Aquatic Acute 1, H400 (M=10); Acute Tox. 4, H302

Specific Concentration Limits: Skin Corr. 1B; H314: C ≥ 5 %; Eye Dam. 1; H318: C ≥ 3 %; Skin Irrit. 2; H315: 1 % ≤ C < 5 %; Eye Irrit. 2; H319: 0.5 % ≤ C < 3 %

calcium chloride

CAS No	ENICS No	Reg No	%
10043-52-4	233-140-8	01-2119494219-28-XXXX	<2%

Hazards: Acute Tox. 4, H302; Eye Irrit. 2, H319

calcium dihydroxide

CAS No	ENICS No	Reg No	%
1305-62-0	215-137-3		<3%

Hazards: Eye Dam. 1, H318

calcium chlorate

CAS No	ENICS No	Reg No	%
10137-74-3	233-378-2	01-2119485491-33-XXXX	<2%

Hazards: Ox. Sol. 2, H272

3. Composition/information on ingredients

3.2 Mixture

calcium carbonate

CAS No	ENICS No	Reg No
471-34-1	207-439-9	01-2119486795-18-XXXX

sodium chloride

CAS No	ENICS No	Reg No
7647-14-5	231-598-3	01-2119485491-33-XXXX

4. First Aid measures

4.1 Description of first aid measures

General Information:

Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

IF INHALED:	In case of unconsciousness place patient stably in side position for transportation.
IF ON SKIN (or hair):	Rinse with warm water. Immediately wash with water and soap and rinse thoroughly.
IF IN EYES:	Rinse opened eye for several minutes (15) under running water. Then consult a doctor.
IF SWALLOWED:	Rinse out mouth and then drink plenty of water. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects: Breathing difficulty
Coughing
Nausea
Gastric or intestinal disorders.

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: Water Spray. Use fire extinguishing methods suitable to surrounding conditions
- DO NOT USE Extinguishing 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

6.2 Environmental precautions

- Keep contaminated washing water and dispose of appropriately.
- 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

- Use neutralising agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation

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 OTHER PRODUCTS
- DO NOT DISSOLVE BEFORE USE
- Thorough dedusting.
- Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:
Substance/product is oxidising when dry.
Keep respiratory protective device available

7.2 Conditions for safe storage, including any incompatibilities.

Store only in unopened original receptacles.
Do not store product where the average daily temperature exceeds 35°C. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products
Information about storage in one common storage facility:
Store away from flammable substances.
Store away from reducing agents.
Do not store together with acids.

Further information about storage conditions: Keep receptacle tightly sealed.

7.3 Specific end uses

- No information available

8. Exposure control/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

General protective and hygienic measures
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin

8. Exposure control/personal protection

Personal protective equipment
Respiratory protection:
Use suitable respiratory protective device only when aerosol or mist is formed
Use suitable respiratory protective device when high concentrations are present.
Filter P2.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:
Protective gloves.
The glove material has to be impermeable and resistant to the product
Due to missing tests no recommendation to the glove material can be given for the product
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Chloroprene rubber, CR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed

Eye protection:
Tightly sealed goggles.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	
Form:	Powder
Colour:	Whitish
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	11.5
Change in condition	
Melting point/freezing point:	100 °C (decomp)
Initial boiling point and boiling range:	undetermined
Flash point:	Not applicable
Flammability (solid, gaseous)	Product is not flammable.
Decomposition temperature:	170 - 180 °C
Auto-ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable
Density at 20 °C:	0.8 g/cm³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in Water at 20 °C:	217 g/l
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	Not applicable.
Solids content:	100.00%

9.2 Other Information

- No information available

10. Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:
Do not store product where the average daily temperature exceeds 35°C.
Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products

10.3 Possibility of hazardous reactions

NEVER MIX THIS PRODUCT WITH ORGANIC CHLORINE (TRICHLOR or DICHLOR)
WITHIN THE SAME CONTAINER
Reacts with strong oxidizing agents
Reacts with alcohols, amines, aqueous acids and alkalis
Reacts with flammable substances

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Poisonous gases/vapours

11. Toxilogical Information

11.1 Information on toxilogical effects

Acute toxicity

Harmful if swallowed.

LD/LC50 values relevant for classification:

Dermal LD50	>2,000	mg/kg	(rabbit)
Inhalative LD50	1,300	mg/kg	(rat)

CAS: 7778-54-3 calcium hypochlorite

Oral LD50	850	mg/kg	(rat)
Dermal LD50	>2,000	mg/kg	(rabbit)
Inhalative LD50	1,300	mg/kg	(rat)

Primary irritant effect:

Skin corrosion/irritation — Causes severe skin burns and eye damage.
Serious eye damage/irritation — Causes severe skin burns and eye damage

Respiratory or skin sensitisation — Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity — Based on available data, the classification criteria are not met.
Carcinogenicity — Based on available data, the classification criteria are not met.
Reproductive toxicity — Based on available data, the classification criteria are not met.
STOT-single exposure — Based on available data, the classification criteria are not met.
STOT-repeated exposure — Based on available data, the classification criteria are not met.
Aspiration hazard — Based on available data, the classification criteria are not met.

12. Ecological Information

12.1 Toxicity

Aquatic toxicity:

Oral LC50	96 hrs	0.088	mg/l	(bluegill sunfish)
		0.16	mg/l	(rainbow trout)
	48 hrs	0.11	mg/l	(daphnia magna)

C AS: 7778-54-3 calcium hypochlorite

Oral LC50	96 hrs	0.088	mg/l	(bluegill sunfish)
		0.16	mg/l	(rainbow trout)
	48 hrs	0.11	mg/l	(daphnia magna)

12.2 Persistence and degradability

Persistence and degradability An organic product, is not eliminable from water by means of biological cleaning processes.

12.3 Bioaccumlative potential

Partition coefficient: No information available

12.4 Mobility in soil

Mobility No information available

12.5 Results of PBT and PvB assessment

vPvB & PBT: Not applicable

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

Recommendation

Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. Transport Information

14.1 UN Number

UN2880

14.2 UN proper shipping name

ADR 2880 CALCIUM HYPOCHLORITE HYDRATED MIXTURE
IMDG CALCIUM HYPOCHLORITE HYDRATED MIXTURE
IATA CALCIUM HYPOCHLORITE HYDRATED MIXTURE

14.3 Transport hazard class(es)

ADR/IMDG

Class 5.1 (O2) Oxidising substances.
Label Label 5.1

14. Transport Information

14.3 Transport hazard class(es)

IATA

Class	5.1 Oxidising substances.
Label	Label 5.1

14.4 Packaging Group II

14.5 Environmental hazards

Marine pollutant: Yes	Yes
	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)

14.6 Special precautions for user	Warning: Oxidising substances.
Danger code (Kemler):	50
EMS Number:	F-H,S-Q
Segregation groups	Hypochlorites
Stowage Category	D
Stowage Code	SW1 Protected from sources of heat. SW11 Cargo transport units shall be shaded from direct sunlight. Packages in cargo transport units shall be stowed so as to allow for adequate air circulation throughout the cargo.
Segregation Code	SG35 Stow "separated from" SGG1-acids SG38 Stow "separated from" SGG2 - ammonium compounds. SG49 Stow "separated from" SGG6-cyanides SG53 Stow "separated from" liquid organic substances.

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

Other information

ADR /IMDG

Limited quantities (LQ)	1 kg
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30g Maximum net quantity per outer packaging: 500g
Transport category	2
Tunnel restriction code	E
UN "Model Regulation":	2880 CALCIUM HYPOCHLORITE HYDRATED MIXTURE, 5.1 , II

15. Regulatory information

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

REGULATION (EU) No 528/2012
Best before : see date on packaging
Providing this container when empty is thoroughly rinsed out in the pool, it may be disposed of via the recycling scheme
Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

National regulations
Waterhazard class: Water hazard class 2 (Assessment by list): hazardous for water.
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
H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
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