AquaSPArkle O2 Gentle Granules

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

1.1 Product Identifier AquaSPArkle O2 Gentle Granules

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

Uses: Disinfectants and algaecides not intended for direct application to humans or animals.

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 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

Skin Corrosion 1A	H314
Acute Tox 4	H302
Eye Dam. 1	H318
Aquatic Chronic 3	H412

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: Danger

Hazard statements:	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage
	H412	Harmful to aquatic life with long lasting effects
Additional Labelling:	Contains:	Dipotassium peroxodisulphate
	EUH208:	May produce an allergic reaction
Precautionary statements:	P102	Keep out of reach of children
	P273:	Avoid release to the environment
	P280:	Wear protective gloves/protective clothing/eye protection/face protection
	P301+P361+P353:	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303+361+353:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

2. Hazard Identification

P305+351+338:	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P310	Immediately call a poison centre
P405:	Store locked up
P501:	Dispose of contents/container in accordance with local regulations.
	Use biocides safely. Always read the label and product information before use

Special Labelling: contains: Dipotassium peroxodisulphate. May produce an allergic reaction

2.3 Other Hazards

PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

3. Composition/information on ingredients

3.1 Mixture

CAS-No.	EINECS	%	Hazards
pentapotassium bis(peroxymonosulphate)bis(sulphate)			01-2119485567 - **
70693-62-8	274-778-7	>=90-<=100%	Acute Tox. 4, H302 : Skin Corr. 1B; H314 : Eye Dam.1; H318: Aquatic Chronic 3; H412
potassium hydrogensulphate			016-056-00-**
7646-93-7	231-594-1	>= 3 - < 5	Skin Corr. 1B; H314; Eye Dam. 1; H318: STOT SE 3; H335; Respiratory system
Dipotassium peroxodisulphate			
77727-21-1	231-781-8	>= 1 - < 10	Ox. Sol/3; H272 Acute Tox 4 H302; Skin Irrit 2; H315 Eye Irrit 2; H315: Resp.Sens1;H334 : Skin Sens.1,;H3017, STOT SE3; H335 ; Aquatic Chronic 3; H412
dipotassium disulphate			
7790-62-7	232-216-8	>= 1 - < 3	Acute Tox. 3; H331: Skin Corr. 1A; H314: Eye Dam. 1; H318

For the full text of the H statements mentioned in this section see Section 16.

4. First Aid measures

4.1 Description of first aid measures

General Advice:	Take affected persons out of danger area and lay down. 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:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact:	Immediate medical treatment is necessary as untreated wounds from skin corrosion heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact:	Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed:	Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconcious person. Call a physician

4.2 Most important symptoms and effects, both acute and delayed

Symptoms & effects: No further relevant information known

4.3 Indication of immediate medical attention and special treatment needed

Treatment Treat symptomatically

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Use extinguishing measures that are appropriate to local circumstances and environment.

Unsuitable media: Carbon dioxide (CO_2). High volume water jet.

5.2 Special hazards arising from the substance or mixture

Specific Hazards : The product itself does not burn.

5.3 Advice for fire-fighters

Special equipment: In the event of fire, wear self-contained breathing apparatusand protective suit

Further Information: Cool containers / tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses..

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use personal protective equipment. Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions: Should not be released into the environment. Prevent material from entering sewers, waterways, or low areas. Do not contaminate water.

6.3 Methods and materials for containment and cleaning up

Cleaning up: Use neutralising agent. Sweep up and shovel into suitable containers for disposal. Avoid dust formation.
After cleaning, flush away traces with water.

Further Information: Dispose of in accordance with local regulations.

6.4 Reference to other sections See Section 8 for personal protective information

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Use only in well-ventilated areas. Do not breathe dust. Avoid dust formation in confined areas. Avoid contact with skin and eyes. Keep away from heat and flame.

7.2 Conditions for safe storage, including any incompatibilities.

Storage: Keep in a dry, cool and well-ventilated place. Protect from contamination

Containers: Store only in original containers

Common storage: Keep away from: Combustible material Never allow product to get in contact with water during storage.

Other Information: Stable under recommended storage conditions

7.3 Specific end uses

Specific use(s) No information available

Further Information Protect from humidity and water

8. Exposure control/personal protection

8.1 Control parameters

If sub-section is empty then no values are applicable.

pentapotassium bis(peroxymonosulphate)bis(sulphate)

Use	Exposure Route	Health Effect	Value:
Workers	Skin contact	Acute - systemic effects	80 mg/kg body weight (bw) /day
Workers	Inhalation	Acute - systemic effects	50 mg/m3
Workers	Skin contact	Acute - local effects	0.449 mg/cm2
Workers	Inhalation	Acute - local effects	50 mg/m3
Workers	Skin contact	Long-term - systemic effects	0.28 mg/m3
Workers	Inhalation	Long-term - systemic effects	0.28 mg/m3
Consumers	Skin contact	Acute - systemic effects	80 mg/kg body weight (bw) /day
Consumers	Inhalation	Acute - systemic effects	25 mg/m3
Consumers	ingestion	Acute - systemic effects	10 mg/kg body weight (bw) /day
Consumers	Skin contact	Acute - local effects	0.224 mg/cm2
Consumers	Inhalation	Acute - local effects	25 mg/m3
Consumers	Skin contact	Long-term - systemic effects	10 mg/kg body weight (bw) /day
Consumers	Inhalation	Long-term - systemic effects	0.14 mg/m3
Consumers	ingestion	Long-term - systemic effects	10 mg/kg body weight (bw) /day
Consumers	Inhalation	Effect: Long-term - local effects	0.14 mg/m3

Predicted No Effect Concentration (PNEC)

pentapotassium bis(peroxymonosulphate)bis(sulphate)

Compartment	Value	
Fresh water	0.022	mg/l
Marine water	0.002	mg/l
Intermittent use/release	0.0109	mg/l
Fresh water sediment	0.017	mg/l
Fresh water sediment	0.017	mg/l
Marine sediment	0.00174	mg/l
Soil	0.885	mg/l
Sewage treatment plants	108	mg/l

8.2 Exposure controls

Engineering measures: Ensure adequate ventilation, especially in confined areas

Eye protection: Wear safety glasses or coverall chemical splash goggles

Hand protection: Wear protective gloves.
Material: butyl-rubber
Break through time: >= 8 h
Glove thickness: 0.5 mm

Skin and body protection: Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots. Remove and wash contaminated clothing before re-use.

Protective measures: When using do not eat or drink. Do not breathe dust.

Hygiene measures: Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. Handle in accordance with good industrial hygiene and safety practice

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Solid form, granular
Colour:	white
Odour:	none
pH @ 20°C:	2.1 at 30 g/l (20 °C)
Melting Point	Decomposes before melting.
Boiling point:	Not applicable
Flash point:	does not flash
Flammability (solid, gas)	Product is not flammable
Oxidizing properties	The substance or mixture is not classified as oxidizing
Explosive properties:	Product does not present an explosion hazard
Vapour pressure	< 0.0000013 hPa
Relative density	2.35 at 20 °C
Water solubility	297 - 357 g/l at 22 °C
Density:	2,35 g/cm³ (20 °C)
Bulk Density:	1.100 - 1.400 kg/m³
Viscosity, dynamic	No data available
Other Information	No further information available

10. Stability and reactivity

10.1 Reactivity

Reactivity: Stable under recommended storage conditions

10.2 Chemical stability

Chemical stability: Stable under normal conditions

10.3 Possibility of hazardous reactions

Possibility of haz.reactions: No information available

10.4 Conditions to avoid

Conditions to avoid: Temperature : > 50 °C Avoid extreme heat

10.5 Incompatible materials

Incompatible materials: Halogenated compounds, Cyanides, Heavy metal salts

10.6 Hazardous decomposition products

Haz. Decomp. products: no data available

11. Toxicilogical Information

11.1 Information on toxicilogical effects

Acute oral toxicity

Acute toxicity estimate : 506.88 mg/kg — Method: Calculation method

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

LD50	Rat	500	mg/kg	Method: OECD Test Guideline 423

Dipotassium peroxodisulphate

LD50	Rat	1,130	mg/kg	OECD Test Guideline 401

Tetra[carbonato(2-)]dihydroxypentamagnesium

LD50	Rat	> 2,000	mg/kg	Fixed Dose Method

Information given is based on data obtained from similar substances.

11. Toxicilogical Information

Acute inhalation toxicity

LC50	4 h Rat	> 5	mg/l	

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

LC50 :	4 h Rat	> 5	mg/l	Method: OECD Test Guideline 403

Dipotassium peroxodisulphate

LC50 :	4 h Rat	> 5	mg/l	Respiratory tract irritation Dust

Acute dermal toxicity

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

LD50 :	Rat	>2,000	mg/kg	Method: Directive 67/548/EEC, Annex V, B.3.

Dipotassium peroxodisulphate

LD50 :	Rabbit	>10,000	mg/kg

Skin irritation

Rabbit Result: Causes burns

	Classification	Result	Method
Pentapotassium bis(peroxymonosulphate) bis(sulphate)			
Rabbit	Corrosive	Causes burns	OECD Test Guideline 404
Dipotassium peroxodisulphate			
Rabbit	Irritating to Skin	Skin irritation	OECD Test Guideline 404
Tetra[carbonato(2-)]dihydroxypentamagnesium			
(RhE)*	Not classified as irritant	No skin irritation	OECD Test Guideline 431

Information given is based on data obtained from similar substances

**reconstructed human epidermis*

Eye irritation

Rabbit Result: Severe eye irritation

Pentapotassium bis(peroxymonosulphate) bis(sulphate)			
Rabbit	Causes severe burns	Corrosive	OECD Test Guideline 404
Tetra[carbonato(2-)]dihydroxypentamagnesium			
Rabbit	Not classified as irritant	No eye irritation	OECD Test Guideline 405

Information given is based on data obtained from similar substances

Sensitisation

Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Classification: Not a sensitizer by inhalation.

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

Guinea Pig

Classification: Does not cause skin sensitisation

Result: Does not cause skin sensitisation

Human

Classification: Does not cause skin sensitisation

Result: Does not cause respiratory sensitisation

Dipotassium peroxodisulphate

Human

Classification: May cause sensitisation by inhalation.

Result: May cause sensitisation by inhalation.

Mouse Local lymph node test

Classification: May cause sensitisation by skin contact

Result: May cause sensitisation by skin contact

Method: OECD Test Guideline 429

11. Toxicilogical Information

Repeated dose toxicity

LC50	4 h Rat	> 5	mg/l

Dipotassium peroxodisulphate
Oral Rat
NOAEL: 131.5 mg/kg
Method: OECD Test Guideline 407
No toxicologically significant effects were found.
Tetra[carbonato(2-)]dihydroxypentamagnesium
Oral Rat
Exposure time: 90d
NOAEL: 1,531 mg/kg
Method: OECD Test Guideline 408
No toxicologically significant effects were found.
Information given is based on data obtained from similar substances

Mutagenicity assessment

Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells. Tests on mammalian cell cultures showed mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.
Dipotassium peroxodisulphate
Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells. Tests on mammalian cell cultures showed mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.
Tetra[carbonato(2-)]dihydroxypentamagnesium
Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals. Information given is based on data obtained from similar substances.

Carcinogenicity assessment

Dipotassium peroxodisulphate
Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects. Information given is based on data obtained from similar substances.
Tetra[carbonato(2-)]dihydroxypentamagnesium
Not classifiable as a human carcinogen. Information given is based on data obtained from similar substances. Animal testing did not show any carcinogenic effects.

Toxicity to reproduction assessment
Dipotassium peroxodisulphate
No toxicity to reproduction Animal testing showed no reproductive toxicity. Information given is based on data obtained from similar substances
Tetra[carbonato(2-)]dihydroxypentamagnesium
No toxicity to reproduction Information given is based on data obtained from similar substances. Animal testing showed no reproductive toxicity.

Assessment teratogenicity

Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Animal testing showed no developmental toxicity.
Dipotassium peroxodisulphate
Animal testing showed no developmental toxicity. Information given is based on data obtained from similar substances
Tetra[carbonato(2-)]dihydroxypentamagnesium
Information given is based on data obtained from similar substances. Animal testing showed no developmental toxicity.

11. Toxicilogical Information

Human experience

Excessive exposures may affect human health, as follows:

Inhalation	Discomfort, Cough, Nose bleeding
Skin contact	Irritation, Burn, Erythema
Eye contact	Corrosion
Ingestion	Stomach: Gastrointestinal disturbance, Inflammation

12. Ecological Information

12.1 Toxicity

Toxicity to fish

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

LC50 / 96 h	Cyprinodon variegatus (sheepshead minnow):	1.09 mg/l
Method:	Directive 67/548/EEC, Annex V, C.1.	

Dipotassium peroxodisulphate

LC50 / 96 h	Oncorhynchus mykiss (rainbow trout):	76.3 mg/l
Method:	US EPA Test Guideline OPP 72-1	

Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

LC50 / 96 h	Pimephales promelas (fathead minnow):	2,120 mg/l

Information given is based on data obtained from similar substances.

Toxicity to aquatic plants

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

ErC50 / 96 h /	Selenastrum capricornutum (green algae):	> 1 mg/l
Method:	OECD Test Guideline 201	
NOEC / 72 h	Selenastrum capricornutum (green algae):	0.5 mg/l

Dipotassium peroxodisulphate

NOEC / 72 h	Pseudokirchneriella subcapitata (green algae)	39.2 mg/l
Method:	OECD Test Guideline 201	

Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

EC50 / 72 h	Desmodesmus subspicatus (green algae):	> 100 mg/l
Method:	OECD Test Guideline 201	

Information given is based on data obtained from similar substances.

NOEC / 72 h	Desmodesmus subspicatus (green algae):	> 100 mg/l
Method:	OECD Test Guideline 201	

Information given is based on data obtained from similar substances

Toxicity to aquatic invertebrates

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

EC50 / 48 h	Daphnia magna (Water flea):	3.5 mg/l
Method:	OECD Test Guideline 202	

Dipotassium peroxodisulphate

EC50 / 48 h	Daphnia magna (Water flea):	120 mg/l
Method:	US EPA Test Guideline OPP 72-2	

Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

EC50 / 48 h	Daphnia magna (Water flea):	140 mg/l

Information given is based on data obtained from similar substances.

12. Ecological Information

Chronic toxicity to fish
Pentapotassium bis(peroxymonosulphate) bis(sulphate)
NOEC / 37 d Cyprinodon variegatus (sheepshead minnow): 0.222 mg/l

Chronic toxicity to aquatic Invertebrates
Pentapotassium bis(peroxymonosulphate) bis(sulphate)
NOEC / 28 d Americamysis bahia (mysid shrimp): 0.267 mg/l

12.2 Persistence and degradability

Biodegradability Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Biodegradable

Dipotassium peroxodisulphate
Readily biodegradable

Tetra[carbonato(2-)]dihydroxypentamagnesium
The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumlative potential

Partition coefficient: n-octanol/water: log Pow: < 0,3
Method: OECD Test Guideline 117

12.4 Mobility in soil

Mobility in soil: No data available

12.5 PBT and PvB assessment

PBT and PvB: Contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
Contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Other adverse effects: No data available

13. Disposal Considerations

13.1 Waste treatment methods

Product: Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging: If recycling is not practicable, dispose of in compliance with local regulations.

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 3260

14.2 UN proper shipping name 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (pentapotassium bis(peroxymonosulphate)bis(sulphate))

14.3 Transport hazard class(es) 8

14. Transport Information

14.4	**Packaging Group**	II	
	Classification Code	C2	
	Hazard Identification Number	80	
	Labels	8	
	Packing Instruction (cargo aircraft)	863:	50,00 kg
	Packing Instruction (passenger aircraft)	859	15,00 kg
14.5	**Environmental hazards**		
	Environmentally hazardous	No	
	Marine pollutant	No	
14.6	**Special precautions for user**		
	Danger code (Kemler):	80	
	EMS Number:	F-A,S-B	
	• **Segregation groups**	Acids	
	• **Stowage Category**	B	

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

15. Regulatory information

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

Other regulations: Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning juveniles must be observed.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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.

▌Indicates updated section