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

1.1 Product Identifier Spa Fusion

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

Uses: Disinfectant and Clarifier

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
Skin Corrosion	Category 1A		H314
Aquatic Chronic	1		H410
STOT	3		H335

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: Danger

H272: May Intensify fire; oxidiser
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H410: Very toxic to aquatic life with long lasting effects
H302 + EUH031 Harmful if swallowed; Contact with acids liberates toxic gases
H335: May cause respiratory irritation

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

P221: Take any precaution to avoid mixing with combustibles
P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking
P285: In case of inadequate ventilate wear respiratory protection
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P405 Store locked up.

Hazardous components which must be listed on the label

sodium dichloroisocyanurate Dihydrate and disodium peroxide sulphate

3. Composition/information on ingredients

3.1 Mixture Mixture of substances listed below with non hazardous additions

Chemical Name	Cas No	EC No.	%	R/H Phrases
sodium dichloroisocyanurate Dihydrate, Index No: 613-030-01-7	51580-86-0	220-767-7	25-50%	H400: H410: H302: H319 : H335
disodium peroxide sulphate	7775-27-1	231-890-1	2.5-10%	H272:H334:H302H315: H319:H317:H335

Additional information: For the wording of the listed risk phrases refer to section 16.

4. First Aid measures

4.1 Description of first aid measures

General Advice: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

If inhaled: : Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation

In case of skin contact: Call a doctor immediately. Immediately wash with water and soap and rinse thoroughly

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately.

If swallowed: Rinse out mouth and then drink plenty of water. Call for a doctor immediately.

DO not give anything by mouth to an unconscious person. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed No relevant information

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, Water Spray, carbon dioxide

Unsuitable media: Extinguishing powder, Foam, Water with full jet

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Nitrogen oxides (NOx); Hydrogen chloride (HCl; Chlorine; Nitrogen trichloride

5.3 Advice for fire-fighters

Protective equipment Fire-fighters should wear full protective clothing and self-contained breathing

5.3 Further Information: Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It 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. Provide adequate ventilation.
Avoid contact with skin and eyes. Do not breath dust.
For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.
Keep contaminated washing water and dispose of appropriately

6.3 Methods and materials for containment and cleaning up

Cleaning up: Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

Further information: Treat recovered material as described in the section "Disposal considerations"

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

Safe Handling: Store in cool, dry place in tightly closed receptacles.
Provide suction extractors if dust is formed.
Restrict the quantity stored at the work place.
Do not refill residue into storage receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.

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 workday. Take off all contaminated clothing immediately.
Avoid contact with skin, eye and clothing.

7.2 Conditions for safe storage, including any incompatibilities.

Storage Requirements: Store only in the original receptacle.

Protection against fire : Normal measures for preventive fire protection

Further information: Protect from humidity and water.

Common storage: Do not store together with acids.

7.3 Specific end uses No information is available.

8. Exposure control/personal protection

8.1 Control parameters

Components with critical values that require monitoring at the workplace: Observe all workplace limits for dust.

Sodium dichloroisocyanurate, dihydrate		ppm	mg/m³
WEL (Great Britain)	Short-term value:		0.07
	Long Term Value		0.02
	Sen; as -NCO		

Exposure controls

General

Keep away from foodstuffs, beverages and food. Instantly remove any contaminated garments. Wash hands during breaks and at the end of the work day. Use skin protection cream for preventive skin protection. Do not eat, drink or smoke while working.

Personal protective equipment

Respiratory protection: Dust proof mask - particle filter mask
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air. Use breathing protection in case of dust formation.

Hand protection: Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.

Suitable Material: Nitrile rubber, NBR: Chloroprene rubber, CR: Butyl rubber, BR

Eye protection: Tightly sealed safety goggles approved to standard EN 166. Provide eye station

Skin and body protection: Protective clothing should be selected specifically for the work place.

General advice: General room ventilation plus local exhaust should be used to maintain exposure below TLV. Eyewash and emergency shower facilities recommended. Remove and wash contaminated clothing before reuse.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Granules
Colour:	White
Odour:	Like chlorine
pH @ 20°C:	6
Melting Point	250°C
Boiling point/boiling range:	Not determined
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas)	Not determined
Bulk Density @ 20°C:	1000 kg/m³
Water solubility:	250 g/l
Ignition temperature:	250°C
Decomposition Temperature:	> 145°C
Viscosity, kinematic:	Not Applicable
Explosive properties:	Product is not explosive.
Oxidising properties:	Oxidiser
Organic solvents:	0.00%

9.2 Other Information

Solids content	100%

10. Stability and reactivity

10.1 Reactivity

Reactivity: Strong exothermic reaction with acids.

10.2 Chemical stability

Chemical stability: To avoid thermal decomposition do not overheat.

10.3 Possibility of hazardous reactions

Hazardous reactions: Reacts with oxidizing agents, strong alkalis, amines and flammable substances
Reacts with acids releasing chlorine.
Reacts with reducing agents.

10.4 Conditions to avoid

Conditions to avoid: No information available.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Haz. Decomp. Products: Hydrogen chloride (HCl) : Chlorine : Nitrogen oxides (NOx)

11. Toxilogical Information

11.1 Information on toxilogical effects

sodium dichloroisocyanurate, dihydrate				**51580-86-0**
Route	**Species**	**Test**	**Value**	**Units**
Oral	Rat	LD50	1400	mg/kg
Dermal	Rabbit	LD50	>5000	mg/kg
Inhalative	Rat	LC50	950	mg/kg
disodium peroxodisulphate				**7775-27-1**
Oral	Rat	LD50	920	mg/kg
Dermal	Rat	LD50	> 10000	mg/kg
Inhalative	Rat	LD50	> 5.1	mg/kg

Primary irritant effect:

on the skin: No irritant effect

on the eye: Irritant effect.

Sensitization: Sensitization possible through inhalation.
Sensitization possible through skin contact.

Carcinogenic: No further information available

Mutagenic: No further information available

12. Ecological Information

12.1 Toxicity: Very Toxic for fish

disodium peroxodisulphate		**7775-27-1**	
Species	**Test**	**Value**	**Units**
daphnia	EC50	133	mg / l
(Danio rerio (Zebrabärbling))	EC50	4.4	mg / l
(Selenastrum capricornutum (Grünalge)	IC50	33	mg / l

12.2 Persistence and degradability

Persistence and degradability: No further relevant information

12.3 Bioaccumlative potential

Bioaccumlative potential: No further relevant information

(continued on Page 6)

12. Ecological Information

12.4 Mobility in soil

Mobility in soil — No further relevant information

12.5 PBT and PvB assessment

PBT and PvB — Not applicable

12.6 Other adverse effects

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms

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 1505

14.2 UN proper shipping name 1505 SODIUM PERSULPHATE, ENVIRONMENTALLY HAZARDOUS

14.3 Transport hazard class(es)

Class	5.1	Oxidising Substances
Classification Code	O2	
Hazard label	50	
Transport Category	3	
EMS No	F-A,S-Q	
Tunnel	E	
LQ	5 kg	

14.4 Packaging Group III

14.5 Environmental hazards Classified as environmentally hazardous:
Marine Pollutant

Special marking — Fish and tree

14.6 Special precautions for user Warning: Oxidising substances

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

SGAV

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
A Chemical Safety Assessment has not been carried out

16. Other information

Relevant phrases

H272	H272 May intensify fire; oxidiser.
H302	H302 Harmful if swallowed.
H315	H315 Causes skin irritation.
H317	H317 May cause an allergic skin reaction.
H319	H319 Causes serious eye irritation.
H334	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	H335 May cause respiratory irritation.
H400	H400 Very toxic to aquatic life.
H410	H410 Very toxic to aquatic life with long lasting effects

Warning! Do not use together with other products. May release dangerous gases (chlorine).
Use biocides safely. Always read the label and product information before use.

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- **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 American Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

Revision 4
Indicates updated section.