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

1.1 Product Identifier Granular Floc

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

Uses: Coagulant for water treatment
Restrictions: None known

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
Serious eye damage / eye irritation	Category 1		H318

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: H318 Causes serious eye damage

Precautionary statements: P280 - Wear eye/face protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.

Hazardous components which must be listed on the label

Aluminium Sulphate

2.3 Other Hazards No other information is available

3. Composition/information on ingredients

3.1 Substances

Chemical nature: Granules

Chemical Name	EC No:	CAS No:	%	Hazards
Aluminium Sulphate	233-135-0	10043-01-3	17	H318 - R41

This product has workplace exposure limits

4. First Aid measures

4.1 Description of first aid measures

General Advice:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. No hazards which require special first aid measures.
If inhaled:	If dust from the material is inhaled, remove the affected person immediately to fresh air. Get medical attention if required
In case of skin contact:	Wash off immediately with plenty of soap & water. If irritation appears seek medical advice
In case of eye contact:	Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses. Call a physician or Poison Control Centre immediately
If swallowed:	If ingestion of a large amount does occur, seek medical attention. Rinse mouth with water

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects: No further information available

4.3 Indication of immediate medical attention and special treatment needed

Treatment: In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation
Symptoms may be delayed

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable media:	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific Hazards : Incomplete combustion may form toxic pyrolysis products

5.3 Advice for firefighters

Protective equipment:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Further Information:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Use appropriate personal protective equipment as detailed in section 8.
Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Stay upwind. Avoid inhalation of dust from the spilled material . Wear a dust mask if dust is generated above exposure limits.

6.2 Environmental precautions

Environmental precautions: No special environmental precautions required

6.3 Methods and materials for containment and cleaning up

Cleaning up: Should not be released into the environment. Prevent entry into waterways, sewers, basements or confined areas.
If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up.
After removal flush contaminated area thoroughly with water. This material and its container must be disposed of as hazardous waste.

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:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin and eyes. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. 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 incompatabilities.

Storage Areas	Prevent any seepage into the ground
Fire and explosion	No special measures required
Further information:	Store in cool, dry conditions in well sealed receptacles
Common Storage	Keep away from food, drink and animal feedstuffs.
Storage Temperature:	No further information available

7.3 Specific end uses

Specific use(s)	Coagulant for water treatment

8. Exposure control/personal protection

8.1 Control parameters

Material		Type	Value	Form
Aluminium Sulphate	10043 - 01 - 3	TWA	2 mg/m^3	Soluble aluminium salts

8.2 Exposure controls

Engineering measures Refer to protective measures listed in sections 7 and 8

Aluminium sulphate (10043-01-3)

DNEL	Type	Route	Value		Form
	Consumer	Oral	0.3	mg/kgbw/day	as Al
		Oral	3.7	mg/kgbw/day	as substance
		Oral	5.7	mg/kgbw/day	as substance
		Oral	0.5	mg/kgbw/day	as Al

Personal protective equipment

Ventilation:	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.
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
Hygiene measures	Do not breathe dust. Do not get in eyes. Handle in accordance with good industrial hygiene and safety practises

Environmental exposure controls

General advice:	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:	Solid
Physical state	Powder or granules
Colour:	White
Odour:	Insignificant
pH @ 20°C:	N/A
Melting point:	120 - 140 °C (248 - 284 °F)
Boiling point:	770 °C (1,418 °F) Decomposes
Flash point:	N/A
Density @ 20°C:	1.61 g/cm3
Water solubility:	Fully miscible

9.2 Other Information

Specific gravity	1.609960996 estimated

10. Stability and reactivity

10.1 Reactivity

Reactivity: Avoid contact with chlorite/hypochlorite/sulphite/oxidising agents and cyanides.

10.2 Chemical stability

Chemical stability: No decomposition if stored and applied as directed

10.3 Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Conditions to avoid: Water

10.5 Incompatible materials

Materials to avoid: Alkalis

10.6 Hazardous decomposition products

Haz. Decomp. products: Sulphur Oxides — Heating may cause toxic furmes

11. Toxilogical Information

11.1 Information on toxilogical effects

Acute toxicity Not classified

Product	Test results
Aluminium Sulphate 17% (solid)	Acute Dermal LD50 Rat: 2,000 mg/kg estimated Acute Oral LD50 Rat: 2,000 mg/kg estimated

Components	Test results
Aluminium sulphate (10043-01-3)	Acute Dermal LD50 Rat: >= 5,000 mg/kg Acute Dermal LD50 Rat: >= 2,000 mg/kg Acute Oral LD50 Rat: >= 5,000 mg/kg Acute Oral LD50 Rat: >= 2,000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Causes serious eye damage. Dust in the eyes will cause irritation.
Respiratory sensitisation	Not classified.
Skin sensitisation	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organtoxicity - single exposure	Not classified.

(continued on Page 5)

11. Toxilogical Information

11.1 Information on toxilogical effects

Specific target organtoxicity - repeated	Not classified.
Aspiration hazard	Not classified.
Mixture versus substance information	None known.
Other information	None known.

Information on likely routes of exposure

Ingestion	Not applicable
Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Irritating to skin
Eye contact	Irritating to eyes
Sensitisation	No sensitizing effect known

12. Ecological Information

12.1 Toxicity

Components	Test results
Aluminium sulphate (10043-01-3)	LC50 Danio (Danio): >= 1,000 mg/l 96.00 hours
	NOEC Danio (Danio): >= 1,000 mg/l 96.00 hours
	EC50 Daphnia: >= 160 mg/l 48.00 hours immobilisation
	NOEC Daphnia: >= 160 mg/l 48.00 hours

* Estimates for product may be based on additional component data not shown.

12.2 Persistence and degradability

Persistence and degradability: Product solely consists of inorganic compounds which are not biodegradable.

12.3 Bioaccumlative potential

Bioaccumlative potential Not assigned.

12.4 Mobility in soil

Mobility in soil Not assigned.

12.5 Results of PBT and PvB :

PBT and PvB : Not assigned.

12.6 Other adverse effects

Do not flush into surface water or sanitary sewer system

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

This product is not classified as hazardous for transport purposes.

14.1	**UN Number**	Not applicable
14.2	**UN proper shipping name**	Not applicable
14.3	**Transport hazard class(es)**	Not applicable
14.4	**Packaging Group**	Not applicable
14.5	**Environmental hazards**	Not applicable
14.6	**Special precautions for user**	Not applicable
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 environemntal regulations/legislation specific for this substance or mixture.

15.2 Chemical Safety Assessment

No information available

16. Other information

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

H315	Causes skin irritation
H318	Causes serious eye damage
H355	May cause respiratory irritation.

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.

- **Abbreviations and acronyms:**

Revision 5

Indicates updated section