

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking**1.1 Product Identifier**

Trade Name: Polyaluminium Chloride Hydroxide Sulphate (PAC)

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

Uses: Heavy duty flocculant for the clarification of swimming pools 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
Eye Irrit. 2	H319
Met. Corr. 1.	H290

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 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: H290

May be corrosive to metals

H319

Causes serious eye irritation

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection

P302+352: IF ON SKIN: Wash with plenty of water/shower.

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P308+313: IF exposed or concerned: Get medical advice/attention.

P337+313: If eye irritation persists: Get medical advice/attention.

2.3 Other Hazards

This product is not identified as a PBT/vPvB substance.

3. Composition/information on ingredients

3.1 Mixture

ALUMINIUM CHLORIDE BASIC - REACH registered number(s): 01-2119531563-43

CAS-No.	EC-No.	%	CLP Hazards
39290-78-3	1327-41-9	30-50%	Skin Irrit. 2: H315; Eye Irrit. 2: H319

4. First Aid measures

4.1 Description of first aid measures

- General Advice: Take off all contaminated clothing immediately
Show this safety data sheet to the doctor in attendance.
- If Inhaled: Move to fresh air. If symptoms persist, call a physician. If unconscious place in recovery position and seek medical advice.
- In case of skin contact: Wash off immediately with soap and plenty of water. If irritation persists call a doctor.
- In case of eye contact: Check for and remove any contact lenses. Open eyes wide apart. Rinse opened eye with plenty of water for at least 15 minutes. Get medical attention.
- If swallowed: Rinse mouth with water. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Skin contact: There may be irritation and redness at the site of contact.
- Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.
- Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
- Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

4.3 Indication of immediate medical attention and special treatment needed

Immediate / special treatment: No specific recommendations. If in doubt, get medical attention promptly.

5. Fire fighting measures

5.1 Extinguishing media:

- Suitable media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
- Unsuitable media: None known

5.2 Special hazards arising from the substance or mixture

- Specific Hazards : Incomplete combustion may form toxic pyrolysis products.
- Hazardous combustion products: Hydrogen chloride, Sulphur oxides

5.3 Advice for firefighters

- Special protective equipment: Wear self-contained breathing apparatus and full protective suit when necessary.
- 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: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6. Accidental release Measures

6.2 Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Methods and materials : Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

Reference to other sections For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

Hygiene measures: Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area.

7.2 Conditions for safe storage, including any incompatibilities.

Storage areas: Keep containers tightly closed in a cool, well-ventilated place.

Unsuitable containers: Common metals

Fire and explosion: Normal measures for preventative fire protection

Further information : Keep container tightly closed.

Storage Temperature: > 0 - < 30 °C

7.3 Specific end uses

The identified uses for this product are detailed in Section 1.

8. Exposure control/personal protection

8.1 Control parameters

Workplace exposure limits: No data available.

DNEL / PNEC No data available.

8.2 Exposure controls

Engineering measures Ensure there is sufficient ventilation of the area.

Respiratory protection Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

State:	Liquid
Colour:	Green-Blue
Odour:	Barely perceptible odour
Solubility in water:	Miscible
Viscosity: 40 cP @ 20°C	1.5 - 2.5
Boiling point/range°C:	100 200
Melting point/range°C: -10	-10
Part.coeff. n-octanol/water:	<3
Relative density:	1.36 - 1.37
pH: 0.4 - 2.0	not applicable

9.2 Other Information No further information available

10. Stability and reactivity**10.1 Reactivity**

Reactivity There are no known reactivity hazards associated with this product.

10.2 Chemical stability

Chemical stability Stable at normal ambient temperatures and when used as recommended.

10.3 Possibility of hazardous reactions

Hazardous reactions: Not applicable

10.4 Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

Materials to avoid Strong bases. Strong oxidising agents.

10.6 Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of hydrogen chloride / phosgene.

11. Toxicological Information**11.1 Information on toxicological effects**

Route	Species	Test	Value	Units
ORAL	RAT	LD50	2000	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact:	There may be irritation and redness at the site of contact.
Eye contact:	There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.
Ingestion:	There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest.

12. Ecological Information**12.1 Toxicity**

Ecotoxicity values: No data available

12.2 Persistence and degradability

Persistence no data available

Biodegradability Not biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation Does not bioaccumulate. Inorganic compound

12.4 Mobility in soil

Mobility Readily absorbed into soil

12.5 Results of PBT and PvB assessment

PBT and PvB assessment This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

Other adverse effects Negligible ecotoxicity.

13. Disposal Considerations**13.1 Waste treatment methods**

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport Information

14.1 UN Number UN3264

14.2 UN proper shipping name

Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aluminium chloride basic)

14.3 Transport hazard class(es)

Transport Class 8

14.4 Packing group

Packing group III

14.5 Environmental hazards

Environmentally hazardous No

Marine Pollutant No

14.6 Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

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

Transport in bulk: Not applicable

15. Regulatory information

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

15.2 Chemical Safety Assessment

There is no data available for this product.

16. Other information

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

H290	May be corrosive to metals
H315	Causes skin irritation
H319	Causes serious eye 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.

Rev 4

Indicates updated section.