

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

### 1.1 Product Identifier

Trade Name: Polyaluminium chloride hydroxide sulphate (PAC)  
CAS No: 329290 - 78 - 3  
EC No: 254 - 400 - 7

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

Uses: At this time we do not yet have information on identified uses.  
Restrictions: At this time we do not yet have information on identified restrictions.

### 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](mailto:sales@cpc-chemicals.co.uk)

### 1.4 Emergency Telephone

Tel: +44 (0) 8712 229081 (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/irritation	Category 2		H315
Serious eye damage/eye irritation	Category 2		H319

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

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Hazard Symbol/Category of danger	Risk phrases
Irritant (Xi)	R36/38

For the full text of the R phrases 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: Warning

Hazard statements: H315 Causes skin irritation  
H319 Causes serious eye irritation

## 2. Hazard Identification

### Precautionary statements:

#### General

P264	Wash hands thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+313	IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338	Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P337+P313	If eye irritation persists: Get medical advice / attention

### Additional Labelling:

EUH210 Safety data sheet available on request

### Hazardous components which must be listed on the label

Aluminium chloride hydroxide sulphate

## 2.3 Other Hazards

No other information is available

## 3. Composition/information on ingredients

### 3.1 Substances

Chemical nature: Aqueous solution

Chemical Name	Identification Numbers	Amount %
Aluminium chloride hydroxide sulphate	CAS No: 329290 - 78 - 3 EC No: 254 - 400 - 7	<100

## 4. First Aid measures

### 4.1 Description of first aid measures

General Advice:	Take off all contaminated clothing immediately
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:	Rinse immediately with plenty of water, also under the eyelids for at least 15 minutes. Call a doctor immediately.
If swallowed:	Rinse mouth with water and then drink plenty of water.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	No further information available
Effects:	No further information available

### 4.3 Indication of immediate medical attention and special treatment needed

Treatment	Treat symptomatically No further information available
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## 5. Fire fighting measures

### 5.1 Extinguishing media:

Suitable extinguishing media: Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable extinguishing media: No information available

### 5.2 Special hazards arising from the substance or mixture

Specific Hazards during fire: The product itself does not burn

Fighting: Use fire fighting methods suitable to surrounding conditions.

### 5.3 Advice for firefighters

Special protective equipment: Wear self contained breathing apparatus (SCBA) and full turn out gear for fire fighting if necessary.

Further Information: No further information available

## 6. Accidental release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Wear protective equipment. Avoid contact with skin and eyes

### 6.2 Environmental precautions

Environmental precautions: No special precautions required

### 6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up: Absorb with liquid-binding material (sand, diatome, acid binders, universal binders, sawdust). Treat recovered material as described in the section 'Disposal considerations'. Flush away residuals with plenty of water.

### 6.4 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 contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practise.

Hygiene measures: Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feed stuffs. When using do not eat and drink.

### 7.2 Conditions for safe storage, including any incompatibilities.

Requirements for storage areas and containers: Keep in an area equipped with acid resistant flooring. Use acid resistant materials only. Use chloride resistant materials only. Keep container tightly closed.

Advice on protection against fire and explosion: Normal measures for preventative fire protection

## 7. Handling and storage continued

Advice on common storage: Store separate from acidic and chloride sensitive materials

German storage class: 8B: Non combustible substances, corrosive

Storage Temperature: 0 - 30°C

### 7.3 Specific end uses

Specific use(s) No information available

## 8. Exposure control/personal protection

### 8.1 Control parameters

Component: Aluminium chloride hydroxide sulphate CAS No: 329290 - 78 - 3

#### Other OELs

Regulatory Basis: UK. EH40 Workplace Exposure Limits (WELs)  
Regulatory List: EH40 WEL  
Value type: Time Weighted Average (TWA):  
Value: 2mg/m<sup>3</sup>

### 8.2 Exposure controls

#### Engineering measures

Refer to protective measures listed in sections 7 and 8

#### Personal protective equipment

Respiratory protection  
Advice: Breathing apparatus needed

Hand protection

Advice: Neoprene gloves  
Protective gloves should be replaced at the first signs of wear

Glove thickness: 0.75mm

Eye protection

Advice: Tightly fitting safety goggles

Skin and body protection

Advice: Protective suit

#### Environmental exposure controls

General advice: No special precautions required.

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

Form:	Liquid
Colour:	Clear to slightly cloudy
Odour:	Odourless
Odour Threshold:	Currently we do not have any information from our supplier about this.
pH @ 20°C:	2 -3
Freezing point:	-12°C
Boiling point:	>100°C
Flash point:	not applicable
Evaporation rate:	Currently we do not have any information from our supplier about this.
Flammability (solid, gas)	Currently we do not have any information from our supplier about this.
Upper explosion limit:	Currently we do not have any information from our supplier about this.
Lower explosion limit:	Currently we do not have any information from our supplier about this.
Vapour pressure:	Currently we do not have any information from our supplier about this.
Relative vapour density:	Currently we do not have any information from our supplier about this.
Density @ 20°C:	ca. 1.192 - 1.3 g/cm <sup>3</sup>
Water solubility:	completely soluble
Partition coefficient:n-octanol/water:	Currently we do not have any information from our supplier about this.
Ignition temperature:	Currently we do not have any information from our supplier about this.
Thermal decomposition:	Currently we do not have any information from our supplier about this.
Viscosity, kinematic:	Currently we do not have any information from our supplier about this.
Explosive properties:	Currently we do not have any information from our supplier about this.
Oxidising properties:	Currently we do not have any information from our supplier about this.

**9.2 Other Information**

No further information available

**10. Stability and reactivity****10.1 Reactivity**

Advice: No information available

**10.2 Chemical stability**

Advice: No decomposition if stores and applied as directed

**10.3 Possibility of hazardous reactions**

Hazardous reactions: No information available

**10.4 Conditions to avoid**

Conditions to avoid Extremes of temperature and direct sunlight

**10.5 Incompatible materials**

Materials to avoid Oxidising agents  
Bases

**10.6 Hazardous decomposition products**

Hazardous decomposition products: Oxygen  
Hydrogen chloride

## 11. Toxicological Information

### 11.1 Information on toxicological effects

Product: FloccPAC Super

CAS No: 329290 - 78 - 3

#### Acute toxicity Oral

Value type: LD50  
Value: > 5,000 mg/kg  
Species: rat

#### Irritation Skin

Remarks: Irritating to skin

#### Irritation Eyes

Remarks: Irritating to eyes

#### Sensitisation

Remarks: No Sensitizing effect known

## 12. Ecological Information

### 12.1 Toxicity

Component: Aluminium chloride hydroxide sulphate

CAS No: 329290 - 78 - 3

#### Acute toxicity Fish

Species: Leuciscus idus (Golden orfe)  
Exposure time: 48h  
Value type: LC50  
Value: ca. 1,500 mg/l

### 12.2 Persistence and degradability

Currently we do not have any information from our supplier about this.

### 12.3 Bioaccumulative potential

Currently we do not have any information from our supplier about this.

### 12.4 Mobility in soil

Currently we do not have any information from our supplier about this.

### 12.5 Results of PBT and PvB assessment

Currently we do not have any information from our supplier about this.

### 12.6 Other adverse effects

#### Additional ecological information

Remarks: Solutions with low pH value must be neutralized before discharge. Ecological injurers are not known or expected under normal use.

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

Product:	Can be disposed as waste water, when in compliance with local regulations.
Contaminated packaging:	Empty remaining contents. Rinse with plenty of water. Store containers and offer for recycling of material when in accordance with the local regulations.
European Waste Catalogue No:	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

**14. Transport Information****14.1 UN Number** 3264**14.2 UN proper shipping name**

ADR:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(Aluminium chloride hydroxide sulphate)
RID:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(Aluminium chloride hydroxide sulphate)
IMDG:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(Aluminium chloride hydroxide sulphate)

**14.3 Transport hazard class(es)**

ADR Class (Label, classification code; Hazard ID; Tunnel Restriction code)	8 8:C1;80;(E)
RID Class (Label, Classification Code; Hazard ID; )	8 8:C1;80;
ADR Class (Labels; EmS)	8 8;F-A,S-B

LQ

**14.4 Packaging Group**

ADR:	III
RID:	III
IMDG:	III

**14.5 Environmental hazards**

Labelling according to 5.2.1.8 ADR:	No
Labelling according to 5.2.1.8 RID:	No
Labelling according to 5.2.1.8 IMDG:	No
Classification as environmentally hazardous according to 2.9.3 IMDG:	No

**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**

IMDG: Not applicable

## 15. Regulatory information

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

### 15.2 Chemical Safety Assessment

Currently we do not have any information from our supplier about this.

## 16. Other information

Full text of R-phrases referred to under sections 2 and 3

R36/38 Irritating to eyes and skin

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

H315 Causes skin irritation

H319 Causes serious eye irritation

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### • Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement 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	Date	By	Amendment
1	18/10/10	Linda Brueford	GHS label elements added and other minor editorial amendments
2	20/01/11	Linda Brueford	New Layout and other minor editorial amendments