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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Blue Flocpac Super 18%
- · Registration number Mixture
- · UFI: 2F70-W0PK-D00N-X3XC
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Product category PC37 Water treatment chemicals
- · Application of the substance / the mixture Water treatment
- · Uses advised against

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving aerosol formation or vapour or dust release in excess of the assigned workplace exposure limits where workers are exposed without suitable respiratory protective equipment (RPE).

Processes involving the use of incompatible substances - refer to section 10.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Complete Pool Controls Ltd

Unit 2. The Park

Stoke Orchard

Bishops Cleeve

Gloucestershire

GL52 7RS

UK

Tel: +44 (0) 8712 229081 (office hours) email: sales@cpc-chemicals.co.uk

- · Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

+44 (0) 8712 229081 (office hours) +44 (0) 3712 229084 (outside of office hours)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals. Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard-determining components of labelling:

Polyaluminium chloride

· Hazard statements

H290 May be corrosive to metals.

H318 Causes serious eye damage.

· Precautionary statements

P280 Wear eye protection / face protection. P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components:

CAS: 1327-41-9 Polyaluminium chloride EINECS: 215-477-2

Met. Corr.1, H290; Eye Dam. 1, H318

>30-≤60%

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

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact:

DO NOT DELAY!

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

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

No further relevant information available.

- · Information for doctor: Treat symptomatically and supportively.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course in the undiluted form.

Do not allow to penetrate the ground/soil.

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· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

· 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Ensure good ventilation/exhaustion at the workplace.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Do not store in aluminium or galvanised containers.

· Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from frost.

 \cdot 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1327-41-9 Polyaluminium chloride

WEL Long-term value: 2 mg/m³
Aluminium salts, soluble

· DNELs

Polyaluminium chloride:

Workers

WORKERS

Long-term exposure - systemic effects

Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 20.2 mg/m³

GENERAL POPULATION

Long-term exposure - systemic effects

Oral DN(M)EL

- DNEL (Derived No Effect Level): 3.4 mg/kg bw/day

· PNECs

Polyaluminium chloride:

PNEC aqua (freshwater): 0.3 µg/L

PNEC aqua (marine water): 0.03 µg/L

PNEC STP: 20 mg/L

 \cdot $\boldsymbol{Additional}$ information: The lists valid during the making were used as basis.

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· 8.2 Exposure controls

· Personal protective equipment:

Select PPE appropriate for the operations taking place taking into account the product properties.

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

Do not eat or drink while working.

Take note of assigned Workplace Exposure Limits.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection:

Impervious protective clothing

Body protection must be chosen depending on activity, possible exposure and product properties.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Colour: Various colours

· Odour: Mild

· Odour threshold: Not determined.

• **pH-value:** 1-2

· Change in condition

Melting point/freezing point: $-10 \, ^{\circ}\text{C}$ Initial boiling point and boiling range: $>100 \, ^{\circ}\text{C}$

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· Flash point:	Cannot support combustion
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.36 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	40 cP
· Solvent content:	
Organic solvents:	0.00 %
VOC (EC)	0.00 %
· 9.2 Other information	NOTE: The physical data presented above are typical values an should not be construed as a specification.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Chemically-active metals.

Inorganic cyanides.

Strong alkalis.

Strong oxidising agents

· 10.6 Hazardous decomposition products:

Hydrogen chloride (HCl)

Metal oxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

 LD/LC50 values relevant for classifica

1327-41-9 Polyaluminium chloride

Oral LD50 >2,000 mg/kg (rat)

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Dermal LD50 >2,000 mg/kg (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

1327-41-9 Polyaluminium chloride

EC50 38 mg/kg (daphnia)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralised.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· European waste catalogue

Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

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Container remains hazardous when empty. Continue to observe all precuations.

Containers, even those that are "empty," may contain residues that can develop hazardous gases and vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

SECTION 14: Transport information	
· 14.1 UN-Number · ADR, IMDG, IATA	UN3264
· 14.2 UN proper shipping name · ADR	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
· IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for userEMS Number:Segregation groups	Warning: Corrosive substances. F-A,S-B Acids
· 14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· Relevant phrases

H290 May be corrosive to metals.

H318 Causes serious eye damage.

· 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Met. Corr.1: Corrosive to metals – Category 1

Eye Dam. 1: Serious eye damage/eye irritation - Category 1