

PAX XL610 (POLY ALUM CHLORIDE)

Material Group: 109750

DECEMBER 2014

Description:

PAX XL610 is a mild basicity liquid polyaluminium chloro silicate is an effective coagulant for the treatment of both potable water and wastewater. It is based on highly charged aluminium which results in low dosages and therefore reduces sludge volumes and pH adjustment demands. It also improves the filterability of the settled water, providing extended filter runs and extremely high rates of turbidity removal.

Test	Specification
Appearance	Clear to yellowish liquid
Aluminium (%)	5.4 ± 0.3
Al ₂ O ₃ (%)	10.1 ± 0.6
Iron (%)	< 0.1
Specific gravity S.G.	1.22 ± 0.02
pH	3 ± 0.5
Basicity (%)	70 ± 10
Active material (moles/kg)	> 1.86
Viscosity @25°C (mPa s)	10 ± 5
Freezing point	-30°C/-22°F
Trace Elements	Less than (mg/kg)
As	2
Cd	2.5
Cr	35
Hg	0.5
Ni	35
Pb	10
Sb	2
Se	2
Zn	23

**PAX XL610 is a potable grade coagulant approved by the DWI in the UK.
This product meets the PE-EN 885 water quality standard (Type 2)
Revision 00**

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Univar Local Conditions of Sale apply to sales of all products

Refer to the appropriate Safety Data Sheet for health, safety and environmental information



SAFETY DATA SHEET ALUMINIUM CHLORIDE BASIC SOLUTION

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

1.1. Product identifier

Product name ALUMINIUM CHLORIDE BASIC SOLUTION

Product number 10975

Synonyms; trade names PAX XL 60, KLORAL 81, PAX 18, AQUARONE 18D, FLOCCULANTE 973, PAX XL 610, PAC 18, EKOFLOCK 90 (POLY ALUMINIUM CHLO), FLOCOGIL 418, PLUSPAC 500, FLOCOGIL 424

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Chemical Flocculating Agent

1.3. Details of the supplier of the safety data sheet

Supplier Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
sds@univar.com
+44 1274 267306

1.4. Emergency telephone number

Emergency Contact Number (Office Hours) +44 1274 267346

Emergency Contact Number (Outside Office Hours) +441865 407333

Sds No. 10975

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Met. Corr. 1 - H290

Health hazards Eye Dam. 1 - H318

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi;R41.

2.2. Label elements

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Pictogram



Signal word	Danger
Hazard statements	H318 Causes serious eye damage. H290 May be corrosive to metals.
Precautionary statements	P234 Keep only in original container. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Contains	ALUMINIUM CHLORIDE BASIC

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ALUMINIUM CHLORIDE BASIC		30-60%
CAS number: 1327-41-9	EC number: 215-477-2	REACH registration number: 01-2119531563-43
Classification	Classification (67/548/EEC or 1999/45/EC)	
Met. Corr. 1 - H290	Xi;R41.	
Eye Dam. 1 - H318		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with water. Wash contaminated clothing before reuse. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

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

Eye contact	Severe irritation, burning and tearing.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Toxic gases or vapours. Hydrogen chloride (HCl).

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Neutralise spilled material with crushed limestone, slaked lime (calcium hydroxide), soda ash (sodium carbonate) or sodium bicarbonate. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Suitable containers: polyethylene, glass lined. Unsuitable container materials: Common metals.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Eye/face protection The following protection should be worn: Chemical splash goggles.

Hand protection It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex).

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Other skin and body protection	Wear rubber footwear. Wear rubber apron.
Hygiene measures	Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow.
Odour	Almost odourless.
pH	pH (concentrated solution): 0.4 - 2.0
Melting point	-10°C
Initial boiling point and range	100 - 200°C @
Relative density	1.30 - 1.37 @ °C
Bulk density	1280 - 1320 kg/m ³
Solubility(ies)	Miscible with water.
Partition coefficient	: <3
Viscosity	40 cP @ 20°C

9.2. Other information

Other information	Not determined.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

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

Materials to avoid	Chemically-active metals. Inorganic cyanides. Strong alkalis. Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	When heated, vapours/gases hazardous to health may be formed. Hydrogen chloride (HCl).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 2,000

Species Rat

Inhalation Vapour may irritate respiratory system/lungs.

Ingestion May cause internal injury.

Skin contact Irritating to skin.

Eye contact Risk of serious damage to eyes.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability The product contains mainly inorganic substances which are not biodegradable. The other substances in the product are not expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient : <3

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 3264

UN No. (IMDG) 3264

ALUMINIUM CHLORIDE BASIC SOLUTION

UN No. (ICAO) 3264

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(CONTAINS ALUMINIUM CHLORIDE BASIC)
Proper shipping name (IMDG)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(CONTAINS ALUMINIUM CHLORIDE BASIC)
Proper shipping name (ICAO)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(CONTAINS ALUMINIUM CHLORIDE BASIC)
Proper shipping name (ADN)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(CONTAINS ALUMINIUM CHLORIDE BASIC)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID subsidiary risk

ADR/RID label 8

IMDG class 8

IMDG subsidiary risk

ICAO class/division 8

ICAO subsidiary risk

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

Emergency Action Code 2X

Hazard Identification Number (ADR/RID) 80

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

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SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations.
Inventory Information	EINECS AICS IECS ECL TSCA PICCS

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	05/02/2012
Revision	03
SDS number	10975
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	R41 Risk of serious damage to eyes.
Hazard statements in full	H290 May be corrosive to metals. H318 Causes serious eye damage.