

Polyaluminum C. H. Sulphate (PAC)



1. IDENTIFICATION

CHEMICAL NAME: Aluminium chloride hydroxide sulphate

CHEMICAL FORMULA: $Al_n(OH)_m(SO_4)_xCl_{(3n-m-2x)}$

CAS No.: 39290-78-3

EINECS No.: 254-400-7

COMPOSITION: Solution of aluminium polyhydroxychlorosulphate

2. FEATURES

The PAC is a clear yellow solution, with negligible odour, completely soluble in water (20°C) and insoluble in organic solvents.

The product is stable for approximately six months

PROPERTIES	METHOD	VALUE
Alumina (% Al_2O_3)	AQP-LABO-010	> 9,5
Relative basicity (%)	AQP-LABO-011	$41,0 \pm 5,0$
Sulphates (%)	AQP-LABO-012	$1,5 \pm 0,5$
pH (1%) (v/v)	AQP-LABO-013	$4,0 \pm 0,5$
Chlorides (%)	AQP-LABO-016	$11,5 \pm 1,0$
Boiling point (°C)	-	110 ± 10
Density a 25°C (g/cm ³)	-	$1,21 \pm 0,02$
viscosity a 25°C (mPa.s)	-	8 ± 5
Water solubility (20°C)	-	Completely soluble
Solubility in organic solvents	-	Insoluble

PROPERTIES	VALUE
Arsenic (mg / kg of Al)	max. ≤ 14
Cadmium (mg / kg of Al)	max. ≤ 3
Chromium (mg / kg of Al)	max. ≤ 30
Mercury (mg / kg of Al)	max. ≤ 4
Nickel (mg / kg of Al)	max. ≤ 20
Lead (mg / kg of Al)	max. ≤ 40
Antimony (mg / kg of Al)	max. ≤ 20
Selenium (mg / kg of Al)	max. ≤ 20

3. APPLICATION

- The main application of PAC is in the coagulation of drinking water and industrial
- As a coagulant in the treatment of industrial effluents

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4. BENEFITS

- It shows excellent behaviour in waters with high organic contamination, and acts in a wide pH range (5-10).
- Allows the reduction of residual aluminium in treated water.
- It has satisfactory behaviour at low temperatures.

5. PRESENTATION

- Granel
- Packaged