

## TECHNICAL SPECIFICATION SHEET

### General Information:

Chemical Name	Aluminium Sulfate
Common Name	Alum
Chemical formula	$Al_2(SO_4)_3 \cdot n H_2O$
CAS #	10043-01-3
EINECS #	233-135-0
Appearance	A Colourless clear liquid
Chemical classification	Acidic Solution

### Specification

#### Critical Parameters:

Alumina content	8.00 ± 0.24 % w/w $Al_2O_3$
Free acid	<1.0 % w/w $H_2SO_4$
Specific gravity	1.317 ± 0.007 @15°C
Aluminium content	42.35 ± 1.27 g/Kg of Product

#### Additional Parameters:

		Equivalent to :
Arsenic (As)	< 14 mg/kg of Al	(< 0.78 mg/L )
Cadmium (Cd)	< 3 mg/kg of Al	(< 0.17 mg/L )
Chromium (Cr)	< 25 mg/kg of Al	(< 1.39 mg/L )
Mercury (Hg)	< 2 mg/kg of Al	(< 0.11 mg/L )
Nickel (Ni)	< 20 mg/kg of Al	(< 1.12 mg/L )
Lead (Pb)	< 10 mg/kg of Al	(< 0.56 mg/L )
Antimony (Sb)	< 10 mg/kg of Al	(< 0.56 mg/L )
Selenium (Se)	< 10 mg/kg of Al	(< 0.56 mg/L )

Iron	< 1.6 g/kg of Al
Insoluble matter	< 23 g/kg of Al
Crystallization point	-7°C @ 42.4 g/kg

**This technical specification conforms with the requirements of I.S EN 878:2004 - Chemicals used for the treatment of water intended for human consumption - for Iron Free Type 1 grade of Aluminium Sulphate liquor.**