

## TECHNICAL SPECIFICATION SHEET

### General Information:

Chemical Name	Aluminium Iron (III) Sulfate
Common Name	Aluminium and Iron Sulfate / ACE 800
Chemical Formula	$x\text{Al}_2(\text{SO}_4)_3 \cdot (1 - x)\text{Fe}_2(\text{SO}_4)_3 \cdot n\text{H}_2\text{O}$ where n is variable and x varies from 0.70 to 0.95
CAS #	$\text{Al}_2(\text{SO}_4)_3$ : 10043-01-3 $\text{Fe}_2(\text{SO}_4)_3$ : 10028-22-5
EINECS #	$\text{Al}_2(\text{SO}_4)_3$ : 233-135-0 $\text{Fe}_2(\text{SO}_4)_3$ : 233-072-9
Appearance	Yellow to brown solution
Chemical classification	Acidic Solution

### Specification

#### Critical Parameters:

Specific gravity	1.353	± 0.014 @15°C
Iron Content	1.93	± 0.23 % w/w Fe
Alumina Content	6.55	± 0.20 % w/w $\text{Al}_2\text{O}_3$
Free acid	< 2.00	% w/w $\text{H}_2\text{SO}_4$

#### Additional Parameters:

		Equivalent to :
Arsenic (As)	< 14 mg/Kg of Al + Fe	(< 1.02 mg/L )
Cadmium (Cd)	< 6.0 mg/Kg of Al + Fe	(< 0.44 mg/L )
Chromium (Cr)	< 50 mg/Kg of Al + Fe	(< 3.65 mg/L )
Mercury (Hg)	< 3.0 mg/Kg of Al + Fe	(< 0.22 mg/L )
Nickel (Ni)	< 150 mg/Kg of Al + Fe	(< 10.95 mg/L )
Lead (Pb)	< 15 mg/Kg of Al + Fe	(< 1.10 mg/L )
Antimony (Sb)	< 5.0 mg/Kg of Al + Fe	(< 0.37 mg/L )
Selenium (Se)	< 15 mg/Kg of Al + Fe	(< 1.10 mg/L )
Insoluble matter	< 25 g/kg Al + Fe	
Crystallization Point	- 18 °C approx.	
Aluminium Content	34.67 ± 1.1 g/kg of Product	

**This technical specification conforms with the requirements of IS EN 887:2005 for Type 2 grade of Aluminium Iron (III) Sulfate**