

TECHNICAL SPECIFICATION SHEET

General Information:

Chemical Name	Iron (III) Sulfate Solution
Common Name	Ferric Sulfate solution, Red Iron Liquor
Chemical formula	$\text{Fe}_2(\text{SO}_4)_3$
CAS #	10028-22-5
EINECS #	233-072-9
Appearance	A red/brown solution
Chemical classification	Acidic Solution

Specification

Critical Parameters:

Specific gravity	1.530	± 0.01 @ 15°C
Iron Content as % w/w Fe	12.00	± 0.36% as w/w Fe
Free acid	<1.50	% w/w H_2SO_4

Additional Parameters:

		Equivalent to :
Arsenic (As)	< 1.0 mg/kg of Fe(III)	(< 0.18 mg/L)
Cadmium (Cd)	≤ 1.0 mg/kg of Fe(III)	(< 0.18 mg/L)
Chromium (Cr)	< 100 mg/kg of Fe(III)	(< 18.36 mg/L)
Mercury (Hg)	< 0.1 mg/kg of Fe(III)	(< 0.02 mg/L)
Nickel (Ni)	< 300 mg/kg of Fe(III)	(< 55.08 mg/L)
Lead (Pb)	< 5.0 mg/kg of Fe(III)	(< 0.92 mg/L)
Antimony (Sb)	< 1.0 mg/kg of Fe(III)	(< 0.18 mg/L)
Selenium (Se)	< 6.0 mg/kg of Fe(III)	(< 1.10 mg/L)

Manganese (Mn)	< 0.5	Mass fraction of Fe (III) in %
Iron (II)	< 2.5	Mass fraction of Fe (III) in %
Insoluble matter	< 0.3	Mass fraction of Fe (III) in %
Freezing Point	-15°C	

This technical specification conforms with the requirements of IS EN 890:2005 for Grade 1 Type 2 Iron (III) Sulphate