

Celestine (Celestite) Specification

Product Name: Celestine (Celestite)

Chemical Formula: SrSO_4

Origin: Iran (Supplied from Dubai)

Supplier: ATDM

1. Chemical Composition

Component	Chemical Formula	Percentage (%)
Strontium Sulfate	SrSO_4	90 – 98%
Barium Sulfate	BaSO_4	1 – 5%
Calcium Sulfate	CaSO_4	1 – 3%
Silica (Quartz, SiO_2)	SiO_2	$\leq 1\%$
Iron Oxide	Fe_2O_3	$\leq 0.5\%$
Moisture Content	H_2O	$\leq 0.5\%$

2. Physical Properties

Property	Value
Color	White, Blue, Gray, or Transparent
Density	3.9 – 4.0 g/cm^3
Hardness (Mohs Scale)	3.0 – 3.5
Crystal System	Orthorhombic
Luster	Vitreous to Pearly
Solubility in Water	Slightly Soluble
Melting Point	1,600°C
pH	Neutral

3. Particle Size Distribution

Mesh Size	Percentage (%)
0 – 10 mm	80 – 90%
10 – 50 mm	10 – 15%
50+ mm	5 – 10%