

Chemical Composition

Description	Requirement	Typical Test Results
Silicon Dioxide (SiO ₂)		20.07%
Aluminum Oxide (Al ₂ O ₃)		4.47%
Ferric Oxide (Fe ₂ O ₃)		2.92%
Calcium Oxide (CaO)		63.89%
Magnesium Oxide (MgO)	5.00* Max.	3.03%
Sulphur Trioxide (SO ₃)	3.50 Max.	2.91%
Alkalies (Na ₂ O + 0.658 K ₂ O)		0.68%
Loss on Ignition (LOI)	5.00 Max.	1.00%
Insoluble Residue (IR)	5.00 Max.	.068%
Tricalcium Silicate (C ₃ S)	66.70* Min.	72.24%
Dicalcium Silicate (C ₂ S)		
Tricalcium Aluminate (C ₃ A)		6.91%
Tetra Calcium Aluminoferrite (C ₄ AF)		8.88%
CaO/SiO ₂	2.0* Min	3.18
Chloride (Cl)	0.10 Max.	0.032%
Physical Properties		
Fineness, (Blaine Air Permiability)		3300 cm ² /gm
Soundness (Le Chatelier Expansion)	10.00 Max.	0.50 mm
Compressive Strength		
After 2 days (N/mm ²)	10.00 Min.	22.50 N/mm ²
After 28 days (N/mm ²)	42.50** Min.	48.00 N/mm ²
Initial setting time (Vicat Test) (minutes)	60.00 Min.	180.0 min