



شرکت سیمان قشم
سهامی خاص

Quality Certificate

Sample: Portland Cement Clinker (SRC OR Type V)

According: INSO 23213

Property		Min	Max	Spec.Limit For Cement (INSO 389)
Silicon dioxide	%SiO ₂	20.0	22.0	---
Aluminium Oxide	%Al ₂ O ₃	3.50	4.50	
Ferric Oxide	%Fe ₂ O ₃	4.00	5.50	
Calcium Oxide	%CaO	63.5	65.0	
Magnesium Oxide	%MgO	2.70	3.20	6.0 Max
Sulphur Trioxide	%SO ₃	0.70	1.10	2.3 Max
Choloride	%Cl	0.01	0.04	
Total Alkalies(Na ₂ O+0.658 %K ₂ O)		0.75	0.95	
Loss On Ignition	%L.O.I	0.20	0.50	3.0 Max
Insoluble Residue	%I.R	0.15	0.30	1.5 Max
Free Lime	%F. CaO	1.00	1.70	
Lime Saturation Factor	LSF	93.0	96.0	
Silica Module	SIM	2.30	2.60	
Alomina Module	ALM	0.80	1.00	
Tricalcium Silicate	%C ₃ S	55.0	63.0	
Dicalcium Silicate	%C ₂ S	13.0	22.0	
Tricalcium Aluminate	%C ₃ A	2.50	3.80	5.0 max
Tetracalcium Aluminoferrite	%C ₄ AF	11.0	15.0	

PHYSICAL & REACTIVITY

2 Days Reactivity @ Fineness of 8% at 45 Min.At 2.6±0.2% SO ₃ Content . Mpa	16	19	-----
7 Days Reactivity @ Fineness of 8% at 45 Min.At 2.6±0.2% SO ₃ Content . Mpa	24	26	>16
28 Days Reactivity @ Fineness of 8% at 45 Min.At 2.6±0.2% SO ₃ Content . Mpa	34	37	32.5-52.5
Moisture %	0.10	0.30	
Litri Weight (Kg/L)	1.30	1.40	

Size Distribution :

0.0 - 1.0 mm %	1.0	10.0	
1.0 - 5.0 mm %	10.0	20.0	
5.0 - 30.0 mm %	20.0	60.0	
30.0 - 50.0 mm %	0.00	5.00	

REMARKS :

LSF = 100 (CaO) / (2.80 SiO₂ + 0.65 Fe₂O₃ + 1.18 Al₂O₃)
 C₃S = 4.07 CaO - (7.6 SiO₂ + 6.718 Al₂O₃ + 1.43 Fe₂O₃ + 2.852SO₃)
 C₂S = 2.867SiO₂ - 0.754 C₃S
 C₃A = 2.65 Al₂O₃ - 1.692 Fe₂O₃
 C₄AF = 3.043 Fe₂O₃

