



شرکت سیمان قشم
سهامی خاص

Quality Certificate

Cement Specifications : Type V							
Product day:							
Chemical composition							
		Amount	INSO			Amount	INSO389
Silicon dioxide	%SiO ₂	20.0 - 22.0	-----	Insotuble Residue	%I.R	0.30 - 0.50	<1.5%
Aluminium Oxide	%AL ₂ O ₃	3.50 - 4.50	-----	Free Lime	%Free CaO	1.20 - 1.70	-----
Ferric Oxide	%Fe ₂ O ₃	4.00 - 5.50	-----	Lime Saturation Factor	LSF	91.0 - 94.0	-----
Calcium Oxide	%CaO	62.5 - 64.0	-----	Silica Module	SLM	2.40 - 2.60	-----
Magnesium Oxide	%MgO	2.50 - 3.20	<6.0	Alomina Moddule	ALM	0.80 - 1.00	-----
Sulphur Trioxide	%SO ₃	1.50 - 2.00	<2.3	Tricalcium Silicate	%C ₃ S	54.0 - 60.0	-----
Potassium Oxide	%K ₂ O	0.50 - 0.60	-----	Dicalcium Silicate	%C ₂ S	13.0 - 21.0	-----
Sodium Oxide	%Na ₂ O	0.35 - 0.50	-----	Tricalcium Aluminate	%C ₃ A	2.5-3.8	<5.0
Loss On Ignition	%L.O.I	1.00 - 2.50	<3.0	2 C ₃ A + C ₄ AF		20.0 - 22.0	<25.0
Physical Test							
				UNIT		Amount	INSO389
Blaine Test				(m2/kg)		290 - 320	260-360
Autoclave Expansion				(%)		0.05 - 0.15	<0.8
Setting Time:							
Initial				(Minute)		110 - 150	>45
Final				(Minute)		200 - 300	<375
Compressive Strength :							
After 2 Days				Mpa		16 - 19	-----
After 7 Days				Mpa		24 - 26	>16
After 28 Days				Mpa		34 - 37	32.5-52.5
REMARKS:							
LSF = 100 (CaO - 0.7 SO ₃) / (2.80 SiO ₂ + 0.65 Fe ₂ O ₃ + 1.18 Al ₂ O ₃)							
C ₃ S = 4.07 CaO - (7.6 SiO ₂ + 6.718 Al ₂ O ₃ + 1.43 Fe ₂ O ₃ + 2.852SO ₃)							
C ₂ S = 2.867SiO ₂ - 0.754 C ₃ S							
C ₃ A=2.65 Al ₂ O ₃ - 1.692 Fe ₂ O ₃							
C ₄ AF = 3.043 Fe ₂ O ₃							

