



Jovein Cement PLC.

Specification Report

Portland Cement Type 2 - CEM I 42.5 R

Sample test : ISIRI 389 - EN 197.1



Chemical Requirement

Properties	In Accordance With ISIRI 389	In Accordance With EN 197.1	Production Of Jovein	Properties	In Accordance With ISIRI 389	In Accordance With EN 197.1	Production Of Jovein
% SiO ₂	20 (min)	*	20.86	%LSF	*	*	94.12
% Al ₂ O ₃	6 (max)	*	4.84	%C3S	*	*	52.16
%Fe ₂ O ₃	6 (max)	*	3.60	%C2S	*	*	20.47
% CaO	*	*	62.55	%C3A	8 (max)	*	6.73
% Mgo	5 (max)	*	2.78	%C4AF	*	*	10.94
% Na2O	*	*	0.48	% CL	*	≤ 0.10%	0.01
% K2O	*	*	0.52	% IR	0.75 (max)	≤ 5.0%	0.26
% SO ₃	3 (max)	≤4.0%	2.59	% LOI	3 (max)	≤ 5.0%	1.36

Physical Requirement

Specific surface area (Cm ² /gr)	2800 (min)	*	3820	Compressive strength (Kg/Cm ²)	2 DAYS	*	≥200	235
Sieve Residue 90 μm (170 Mesh)	*	*	0.33		3 DAYS	100 (min)	*	317
Sieve Residue 45 μm (325 Mesh)	*	*	4.65		7 DAYS	175 (min)	*	423
%Autoclave expansion	0.8 (max)	*	0.21		28 DAYS	315 (min)	≥425≤625	518
Vicat test	First (min)	45 (min)	≥60	Compressive	2 DAYS	*	*	48
	Last (hr)	6 (max)	*		3 DAYS	*	*	56
Specific Gravity (g/Cm ³)	*	*	3.18	Bending	7 DAYS	*	*	68
Free cao	*	*	1.2	(Kg/Cm ²)	28 DAYS	*	*	81