



NABL

Accredited Laboratory

Certificate No. : TC - 8013

JK LAKSHMI
C E M E N T

DASTAN, PALSANA, DIST. SURAT (GUJ.)

LICENCE NO. CM/L-7200051996

TEST CERTIFICATE

Customer Name & Address : Marketing Department of JK Lakshmi Cement Ltd., Surat

Certificate (ULR) No. : TC801319000000030P

Sample Identification : Ordinary Portland Cement – 53 Grade (As per IS 269 : 2015)

Sample Date : 29.01.2019 to 04.02.2019 (Week No : 05)

Date of Issue: 13.02.2019

Sr. No	Particulars	Test Method	Requirement of IS:269	Results Obtained
Chemical Requirements				
1	Ratio of Percentage of Lime to percentage of silica, alumina and iron oxide $\text{CaO} - 0.7\text{SO}_3$ ----- $2.8\text{SiO}_2 + 1.2\text{Al}_2\text{O}_3 + 0.65\text{Fe}_2\text{O}_3$	IS : 4032 - 1985	Not greater than 1.02 And not less than 0.80	0.878
2	Ratio of percentage of alumina to that of iron oxide	IS : 4032 - 1985	Not less than 0.66	1.52
3	Insoluble residue(% by mass)	IS : 4032 - 1985	Not more than 5.0	2.04
4	Magnesia(% by mass)	IS : 4032 - 1985	Not more than 6.0	2.57
5	Total sulphur calculated as Sulphuric Anhydride (SO_3) (% by mass)	IS : 4032 - 1985	Not more than 3.5	2.82
6	Total loss on ignition (% by mass)	IS : 4032 - 1985	Not more than 4.0	1.65
7	Chloride(% by mass)*	IS : 4032 - 1985	Not more than 0.1	0.022
Mechanical Requirements				
1	Fineness (m^2/kg)	IS : 4031 (Part-2) - 1999	Not less than 225	330
2	Normal Consistency (%)	IS : 4031 (Part-4) - 1988	-	27.75
3	Soundness : a) Le-chateliere expansion (mm) b) Autoclave test expansion (%)	IS : 4031 (Part-3) - 1988	Not more than 10 Not more than 0.8	1.0 0.094
4	Setting Time : a) Initial setting time (Minutes) b) Final setting time (Minutes)	IS : 4031 (Part-5) - 1988	Not less than 30 Not more than 600	130 185
5	Compressive Strength : a) 72 ± 1 Hours (3 Days) (MPa) b) 168 ± 2 Hours (7 Days) (MPa) c) 672 ± 4 Hours (28 Days) (MPa)	IS : 4031 (Part-6) - 1988	Not less than 27 Not less than 37 Not less than 53	39.2 48.5 Under Testing

Remarks : Results reported above are the average test results of all sample testing during the relevant week.

*: Not covered under NABL Accreditation at present.

Technical Manager

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Authorized Signatory

