



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. : TC801318000000133P

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

Sample Date : 15.01.2019 to 21.01.2019 (Week No : 03)

Date of Issue: 30.01.2019

Sr. No	Particulars	Test Method	Requirement of IS:269	Results Obtained
<b>Chemical Requirements</b>				
1	Ratio of Percentage of Lime to percentage of silica, alumina and iron oxide $CaO - 0.7SO_3$ ----- $2.8 SiO_2 + 1.2 Al_2O_3 + 0.65 Fe_2O_3$	IS : 4032 - 1985	Not greater than 1.02 And not less than 0.80	<b>0.879</b>
2	Ratio of percentage of alumina to that of iron oxide	IS : 4032 - 1985	Not less than 0.66	<b>1.54</b>
3	Insoluble residue(% by mass)	IS : 4032 - 1985	Not more than 5.0	<b>1.79</b>
4	Magnesia(% by mass)	IS : 4032 - 1985	Not more than 6.0	<b>2.52</b>
5	Total sulphur calculated as Sulphuric Anhydride (SO <sub>3</sub> ) (% by mass)	IS : 4032 - 1985	Not more than 3.5	<b>2.93</b>
6	Total loss on ignition (% by mass)	IS : 4032 - 1985	Not more than 4.0	<b>1.58</b>
7	Chloride(% by mass)*	IS : 4032 - 1985	Not more than 0.1	<b>0.021</b>
<b>Mechanical Requirements</b>				
1	Fineness (m <sup>2</sup> /kg)	IS : 4031 (Part-2) - 1999	Not less than 225	<b>336</b>
2	Normal Consistency (%)	IS : 4031 (Part-4) - 1988	-	<b>27.75</b>
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	<b>1.0</b> <b>0.090</b>
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	<b>125</b> <b>170</b>
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	<b>38.0</b> <b>47.4</b> <b>Under Testing</b>

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

