



**JKLAKSHMI**  
CEMENT Ltd.

**JAYKAYPURAM—307019 Dist. Sirohi, Rajasthan**  
**TEST CERTIFICATE FOR JK LAKSHMI 53 GRADE OPC**



**LICENCE NO . CM/L-8099186**

**WEEK No 47**

**DATE OF ISSUE 23.12.2016**

CHEMICAL / PHYSICAL REQUIREMENTS	SPECIFICATION CLAUSE No.	REQUIREMENT AS PER IS No.12269 – 2013 AMENDMENT No. 6	RESULTS OBTAINED
<b>CHEMICAL REQUIREMENTS : #</b>	<b>5</b>		
(i) Ratio of Percentage of Lime to # percentage of silica, alumina and iron oxide CaO – 0.7SO <sub>3</sub> ----- 2.8 SiO <sub>2</sub> + 1.2 Al <sub>2</sub> O <sub>3</sub> + 0.65 Fe <sub>2</sub> O <sub>3</sub>	5.1	Not Greater than 1.02 And not less than 0.80	0.923
(ii) Ratio of percentage of alumina to that # of iron oxide	5.1	Not less than 0.66	1.55
(iii) Insoluble residue, percent by mass #	5.1	Not more than 4.0	2.68
(iv) Magnesia, percent by mass #	5.1	Not more than 6.0	2.32
(v) Total sulphur calculated as Sulphuric # Anhydride (SO <sub>3</sub> ), Percent by mass	5.1	Not more than 3.5	2.75
(vi) Total loss on ignition #	5.1	Not more than 4%	2.38
(vii) Chloride, percent by mass #	5.1	Not more than 0.1	0.042
<b>PHYSICAL REQUIREMENTS :</b>	<b>6</b>		
(i) FINENESS : SP. SURFACE	6.1	Not less than 225 m <sup>2</sup> /kg	359
(ii) SOUNDNESS : a) Le-chatelier method Expansion	6.2	Not more than 10 mm	1.00
b) Auto clamp test expansion C.NO.T-0720		Not more than 0.8%	0.060
(iii) SETTING TIME a) Initial Setting time in Minutes	6.3	Not less than 30	115
b) Final setting time in Minutes		Not more than 600	150
(iv) COMPRESIVE STRENGTH 72 ± 1 Hours (3 Days)	6.4	Not less than 27 MPa	43.0
168 ± 2 Hours (7 Days)		Not less than 37 MPa	51.0
672 ± 4 Hours (28 Days)		Not less than 53 MPa	60.0



**REMARKS : The test results complies with the requirements of IS: 12269– 2013for 53 grade OPC for All Chemical requirements and Physical requirements including Compressive Strength up to 28 day. Test Protocol : IS:4032 and IS:4031.**

# Not covered under NABL Accreditation at present

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

**CERTIFIED**  
ISO 9001:2008  
ISO 14001:2004  
OHSAS 18001:2007

*S. K. S.*  
HOD(QC)