



# JK LAKSHMI

CEMENT LTD.

JAYKAYPURAM-307019 Dist. Sirohi , Rajasthan  
TEST CERTIFICATE FOR JK LAKSHMI 53 – GRADE OPC



ULR NO. TC-5708190000000122F

LICENCE NO . CM/L-2361143

TC-5708

WEEK No 31

DATE OF ISSUE 13.08.2019

CHEMICAL / PHYSICAL REQUIREMENTS	SPECIFICATION CLAUSE No.	REQUIREMENT AS PER IS No. 269 – 2015 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	0.889
(ii) Ratio of percentage of alumina to that of iron oxide	5.1	Not less than 0.66	1.49
(iii) Insoluble residue, percent by mass	5.1	Not more than 5.0	3.00
(iv) Magnesia, percent by mass	5.1	Not more than 6.0	2.48
v) Total sulphur calculated as Sulphuric Anhydride (SO <sub>3</sub> ), Percent by mass	5.1	Not more than 3.5	3.10
(vi) Total loss on ignition	5.1	Not more than 4%	2.68
(vii) Chloride, percent by mass	5.1	Not more than 0.1	0.008
<b>PHYSICAL REQUIREMENTS :</b>	<b>6</b>		
<b>NC</b>		<b>%</b>	<b>27.50</b>
(i) FINENESS : SP. SURFACE	6.1	Not less than 225 m <sup>2</sup> /kg	354
(ii) SOUNDNESS : a) Le-chatelier method Expansion	6.2	Not more than 10 mm	1.00
b) Auto clave test expansion		Not more than 0.8%	0.070
(iii) SETTING TIME a) Initial Setting time in Minutes	6.3	Not less than 30	135
b) Final setting time in Minutes		Not more than 600	175
(iv) COMPRESIVE STRENGTH 72 ± 1 Hours (3 Days)	6.4	Not less than 27 MPa	41.0
168 ± 2 Hours (7 Days)		Not less than 37 MPa	49.0
672 ± 4 Hours (28 Days)		Not less than 53 MPa	Under Testing

**REMARKS :** The test results complies with the requirements of IS:269 – 2015 for 53 grade OPC for all Chemical Requirements and Physical requirements including Compressive Strength Up to 7- days .  
Test Protocol : IS:4032 and IS:4031.

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

CERTIFIED  
ISO 9001:2015  
ISO 14001:2015  
OHSAS 18001:2007

HOD (QC)

