



**JK LAKSHMI**  
CEMENT LTD.  
**JAYKAYPURAM-307019 Dist. Sirohi , Rajasthan**  
**TEST CERTIFICATE FOR JK LAKSHMI 43 – GRADE OPC**



ULR NO. TC-57081800000000021F  
WEEK No 39

LICENCE NO . CM/L-2361143

TC.-5708

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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 $\text{CaO} - 0.7\text{SO}_3$ ----- $2.8 \text{SiO}_2 + 1.2 \text{Al}_2\text{O}_3 + 0.65 \text{Fe}_2\text{O}_3$	5.1	Not Greater than 1.02 And not less than 0.66	0.906
(ii) Ratio of percentage of alumina to that of iron oxide	5.1	Not less than 0.66	1.51
(iii) Insoluble residue, percent by mass	5.1	Not more than 5.0	2.92
(iv) Magnesia, percent by mass	5.1	Not more than 6.0	2.49
v) Total sulphur calculated as Sulphuric Anhydride ( $\text{SO}_3$ ), Percent by mass	5.1	Not more than 3.5	2.55
(vi) Total loss on ignition	5.1	Not more than 5%	2.00
(vii) Chloride, percent by mass	5.1	Not more than 0.1	0.028
<b>PHYSICAL REQUIREMENTS :</b>	<b>6</b>		
<b>NC</b>		<b>%</b>	<b>27.75</b>
(i) FINENESS : SP. SURFACE	6.1	Not less than 225 m <sup>2</sup> /kg	280
(ii) SOUNDNESS :	6.2		
a) Le-chatelier method Expansion		Not more than 10 mm	1.00
b) Auto clave test expansion		Not more than 0.8%	0.075
(iii) SETTING TIME	6.3		
a) Initial Setting time in Minutes		Not less than 30	135
b) Final setting time in Minutes		Not more than 600	170
(iv) COMPRESIVE STRENGTH	6.4		
72 ± 1 Hours (3 Days)		Not less than 23 MPa	34.0
168 ± 2 Hours (7 Days)		Not less than 33 MPa	42.8
672 ± 4 Hours (28 Days)		Not less than 43 MPa * Not more than 58 MPa	Under Testing

**REMARKS :** The test results complies with the requirements of IS:269 – 2015 for 43 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 9001:2008  
ISO 14001:2004  
OHSAS 18001:2007

*S. K. S.*

HOD (QC)

