



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



LICENCE NO . CM/L-2361143

CT.-5708

WEEK No 07

DATE OF ISSUE 20.02.2018

| CHEMICAL / PHYSICAL REQUIREMENTS | SPECIFICATION CLAUSE No. | REQUIREMENT AS PER IS No. 269 – 2015 AMENDMENT No. 6 | RESULTS OBTAINED |
|--|--------------------------|--|------------------|
| CHEMICAL REQUIREMENTS : | 5 | | |
| (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 | 0.880 |
| (ii) Ratio of percentage of alumina to that of iron oxide | 5.1 | Not less than 0.66 | 1.59 |
| (iii) Insoluble residue, percent by mass | 5.1 | Not more than 5.0 | 2.05 |
| (iv) Magnesia, percent by mass | 5.1 | Not more than 6.0 | 2.50 |
| v) Total sulphur calculated as Sulphuric Anhydride (SO_3), Percent by mass | 5.1 | Not more than 3.5 | 2.58 |
| (vi) Total loss on ignition | 5.1 | Not more than 5% | 1.60 |
| (vii) Chloride, percent by mass | 5.1 | Not more than 0.1 | 0.028 |
| PHYSICAL REQUIREMENTS : | 6 | | |
| NC | | % | 27.50 |
| (i) FINENESS : SP. SURFACE | 6.1 | Not less than 225 m ² /kg | 279 |
| (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 | 130 |
| b) Final setting time in Minutes | | Not more than 600 | 175 |
| (iv) COMPRESIVE STRENGTH 72 ± 1 Hours (3 Days) | 6.4 | Not less than 23 MPa | 33.0 |
| 168 ± 2 Hours (7 Days) | | Not less than 33 MPa | 41.0 |
| 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

HOD (QC)

