



**JAYKAYPURAM—307019 Dist. Sirohi, Rajasthan**  
**TEST CERTIFICATE FOR JK LAKSHMI 43 GRADE OPC**  
**LICENCE NO . CM/L-2361143**

WEEK No. 3

DATE OF ISSUE 29.01.2016

| CHEMICAL / PHYSICAL REQUIREMENTS  | SPECIFICATION CLAUSE No. | REQUIREMENT AS PER IS No. 8112 – 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<br>CaO – 0.7SO <sub>3</sub><br>-----<br>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<br>And not less than 0.66       | 0.921            |
| (ii) Ratio of percentage of alumina to that # of iron oxide   | 5.1                      | Not less than 0.66                                    | 1.62             |
| (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                                     | 2.36             |
| v) Total sulphur calculated as Sulphuric Anhydride (SO <sub>3</sub> ), Percent by mass #  | 5.1                      | Not more than 3.5                                     | 2.28             |
| (vi) Total loss on ignition #   | 5.1                      | Not more than 5%                                      | 2.20             |
| (vii) Chloride, percent by mass #   | 5.1                      | Not more than 0.1                                     | 0.036            |
| <b>PHYSICAL REQUIREMENTS :</b>  | <b>6</b>                 |   |                  |
| (i) FINENESS :<br>SP. SURFACE   | 6.1                      | Not less than 225 m <sup>2</sup> /kg                  | 278              |
| (ii) SOUNDNESS :<br>a) Le-chatelier method<br>Expansion<br>C.NO.T-0720  | 6.2                      | Not more than 10 mm                                   | 1.00             |
| b) Auto clave test expansion  |                          | Not more than 0.8%                                    | 0.060            |
| (iii) SETTING TIME<br>a) Initial Setting time in Minutes  | 6.3                      | Not less than 30                                      | 130              |
| b) Final setting time in Minutes  |                          | Not more than 600                                     | 180              |
| (iv) COMPRESIVE STRENGTH<br>72 ± 1 Hours (3 Days)   | 6.4                      | Not less than 23 MPa                                  | 33.0             |
| 168 ± 2 Hours (7 Days)  |                          | Not less than 33 MPa                                  | 40.0             |
| 672 ± 4 Hours (28 Days)   |                          | Not less than 43 MPa<br>* Not more than 58 MPa        | Under Testing    |



C.NO.T-0720

**REMARKS :** The test results complies with the requirements of IS:8112 – 2013 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.

# 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. Meena*  
**HOD (QC)**

