



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



## LICENCE NO. CM/L-8099186

WEEK No 12

**DATE OF ISSUE 22.04.2016** 

| CHEMICAL / PHYSICAL<br>REQUIREMENTS   | SPECIFICATION<br>CLAUSE No. | REQUIREMENT AS PER<br>IS No.12269 – 2013<br>AMENDMENT No. 6 | RESULTS<br>OBTAINED |
|---|-----------------------------|---|---------------------|
| CHEMICAL REQUIREMENTS: #  (i) Ratio of Percentage of Lime to # percentage of silica, alumina and iron oxide  CaO – 0.7SO <sub>3</sub> | <b>5</b> 5.1                | Not Greater than 1.02<br>And not less than 0.80             | 0.923               |
| $2.8 \text{ SiO}_2 + 1.2 \text{ Al}_2\text{O}_3 + 0.65 \text{ Fe}_2\text{O}_3$  |                             |   |                     |
| (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 4.0   | 2.64                |
| (iv) Magnesia, percent by mass #  | 5.1                         | Not more than 6.0   | 2.30                |
| (v) Total sulphur calculated as Sulphuric # Anhydride (SO <sub>3</sub> ), Percent by mass   | 5.1                         | Not more than 3.5   | 2.25                |
| (vi) Total loss on ignition #   | 5.1                         | Not more than 4%  | 2.21                |
| (vii) Chloride, percent by mass #   | 5.1                         | Not more than 0.1   | 0.042               |
| PHYSICAL REQUIREMENTS:  | 6                           |   |                     |
| (i) FINENESS: SP. SURFACE   | 6.1                         | Not less than 225 m2/kg                                     | 358                 |
| (ii) SOUNDNESS:  a) Le-chatelier method  Expansion  | 6.2                         | Not more than 10 mm   | 1.00                |
| b) Auto clave 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  | 110                 |
| 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 HOD(QC)

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