



JK LAKSHMI
CEMENT Ltd.

JAYKAYPURAM—307019 Dist. Sirohi, Rajasthan
TEST CERTIFICATE FOR PORTLAND POZZOLANA CEMENT



LICENCE NO . CM/L-1234838

TC-5708

ULR NO. TC-5708190000000091F

WEEK No. 23

DATE OF ISSUE 16.07.2019

| CHEMICAL / PHYSICAL REQUIREMENTS | SPECIFICATION CLAUSE No. | REQUIREMENT AS PER IS No.1489(PART-I) – 2015 | RESULTS OBTAINED |
|--|--------------------------|---|------------------|
| CHEMICAL REQUIREMENTS : | 6 | | |
| (i) Loss on ignition, percent by mass, Max. | 6.1 | 5.0 | 2.56 |
| (ii) Magnesia, percentage by mass, Max | 6.1 | 6.0 | 2.45 |
| (iii) Sulphuric Anhydride (SO ₃), percent by mass, Max | 6.1 | 3.5 | 2.46 |
| (iv) Insoluble Residue, percent by mass Max. | 6.1 | $4(100-x)$ $x + \frac{100}{0.6x}$ (x=where x is the declare % age of Fly Ash) | 23.98 |
| (v) Insoluble Residue , percent by mass Min | 6.1 | 0.6 x | 15.0 |
| (vi) Declared % of Fly Ash | 5 & 9.1 | Not less than 15% and Not more than 35% | 28+/-3 |
| (vii) Chloride, percent by mass | 9.2 | Not more than 0.1 | 0.046 |
| PHYSICAL REQUIREMENTS : | 7 | | |
| (i) FINENESS : SP. SURFACE | 7.1 | Not less than 300 m ² /kg | 345 |
| (ii) SOUNDNESS : a) Le-chatelier method Expansion | 7.2 | Not more than 10 mm | 0.50 |
| b) Auto clave test expansion | | Not more than 0.8% | 0.050 |
| (iii) SETTING TIME a) Initial Setting time in Minutes | 7.3 | 30 minutes, minimum | 140 |
| b) Final setting time in Minutes | | 600 minutes, maximum | 180 |
| (iv) COMPRESIVE STRENGTH 72 ± 1 Hours (3 Days) | 7.4 | 16 Mpa, Min | 28.0 |
| 168 ± 2 Hours (7 Days) | | 22 Mpa, Min | 38.0 |
| 672 ± 4 Hours (28 Days) | | 33 Mpa, Min | 48.0 |
| (v) Drying Shrinkage | 7.5 | Not be more than 0.15% | 0.0480 |

REMARKS : The test results complies with the requirements of IS: 1489(Part-I) : 2015 for all Chemical requirements and Physical requirements including Compressive Strength up to 28-days.

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)

