



DASTAN, PALSANA, DIST. SURAT (GUJ.)
TEST CERTIFICATE FOR PORTLAND POZZOLANA CEMENT
 LICENCE NO. CM/L-7200051895

Week No : 38 (17/09/2018 to 23/09/2018)

Date of Issue : 02/10/2018

| Sr. No | Particulars | IS Clause | Test Method | Requirement of IS:1489 (Part-I) | Results Obtained |
|------------------------------|---|-----------|----------------------------|--|--|
| Chemical Requirements | | | | | |
| 1 | Loss on ignition(% by mass) | 6 | IS : 4032 - 1985 | Not more than 5.0 | 2.03 |
| 2 | Magnesia(% by mass) | | IS : 4032 - 1985 | Not more than 6.0 | 2.40 |
| 3 | Sulphuric Anhydride (SO ₃)(% by mass) | | IS : 4032 - 1985 | Not more than 3.5 | 2.88 |
| 4 | Insoluble Residue(% by mass) | | IS : 4032 - 1985 | $\frac{4(100-x)}{x+100}$ (x=where x is the declare % age of Fly Ash) | 24.82 |
| 5 | Chloride(% by mass) | | IS : 4032 - 1985 | Not more than 0.1 | 0.023 |
| 6 | Declared % of Fly Ash (\leq) | | - | - | Not less than 15% and Not more than 35% |
| Physical Requirements | | | | | |
| 1 | Fineness (m ² /kg) | 7 | IS : 4031 (Part-2) - 1999 | Not less than 300 | 365 |
| 2 | Normal Consistency (%) | | IS : 4031 (Part-4) - 1988 | - | 32.75 |
| 3 | Soundness : a) Le-chatelier expansion (mm) b) Autoclave test expansion (%) | | IS : 4031 (Part-3) - 1988 | Not more than 10 Not more than 0.8 | 0.5 0.048 |
| 4 | Setting Time : a) Initial setting time (minutes) b) Final setting time (minutes) | | IS : 4031 (Part-5) - 1988 | Not less than 30 Not more than 600 | 145 195 |
| 5 | Compressive Strength : a) 72 \pm 1 Hours (3 Days) (MPa) b) 168 \pm 2 Hours (7 Days) (MPa) c) 672 \pm 4 Hours (28 Days) (MPa) | | IS : 4031 (Part-6) - 1988 | Not less than 16 Not less than 22 Not less than 33 | 30.5 38.3 Under Testing |
| 6 | Drying Shrinkage (%) | | IS : 4031 (Part-10) - 1988 | Not more than 0.15 | Under Testing |

REMARKS : The test results complies with the requirements of IS: 1489(Part-I) (PPC) for All Chemical requirements and Physical requirements including Compressive Strength up to **07-days** . Test Protocol IS : 4032 and IS : 4031 .

R.A. Alad

Officer

[Signature]

Authorized Signatory