

## HEIDELBERGCEMENT INDIA LTD, AMMASANDRA

### TEST REPORT FOR MYCEM

REF.: HCIL/QA/2016/46

DATE : 19.12.2016

WEEK NO. : 46

HCIL(AMS)-QCD-F026  
11-11-2016 to 17-11-2016

| CHARACTERISTIC   | RESULTS OBTAINED | REQUIREMENT OF IS455:1989      |
|--|------------------|--------------------------------|
| <b>(A) CHEMICAL COMPOSITION</b>                        |                  |                                |
| (i) Magnesia (MgO), % by mass                          | 8.69             | 10.0 Maximum                   |
| (ii) Insoluble Residue, % by mass                      | 1.60             | 4.0 Maximum                    |
| (iii) Sulphuric Anhydride (SO <sub>3</sub> ) % by mass | 2.25             | 3.5 Maximum                    |
| (iv) Sulphide Sulphur (S)                              | 0.29             | 1.5 Maximum                    |
| (v) Loss on Ignition % by mass                         | 2.18             | 5.0 Maximum                    |
| (vi) Total Chloride (Cl), % by mass                    | 0.04             | 0.10 Maximum                   |
| <b>(B) PHYSICAL TESTING</b>                            |                  |                                |
| <b>1. Fineness of Cement</b>                           |                  |                                |
| Sp.Surface blaine (m <sup>2</sup> /Kg)                 | 332              | 225 m <sup>2</sup> /kg minimum |
| <b>2. Soundness</b>                                    |                  |                                |
| Le-Chatelier Expansion (mm)                            | 1.0              | 10 mm Maximum                  |
| Autoclave Expansion (%)                                | 0.16             | 0.8 % Maximum                  |
| <b>3. Setting Time</b>                                 |                  |                                |
| Initial (in Minutes)                                   | 95               | Not less than 30 minutes       |
| Final (in Minutes)                                     | 200              | Not more than 600 minutes      |
| <b>4. Compressive Strength (MPa)</b>                   |                  |                                |
| (a) At 72 ± 1 Hrs.                                     | 23.0             | 16 MPa Minimum                 |
| (b) At 168 ± 2 Hrs.                                    | 33               | 22 MPa Minimum                 |
| (c) At 672 ± 4 Hrs.                                    | 50.8             | 33 MPa Minimum                 |

**Remarks :**

1. Physical Lab Temperature during testing - 27 ± 2° C
2. Portland Slag Cement conforms to the requirement of IS 455-1989 in all respects.

  
Mgr (QC)