

**HEIDELBERGCEMENT INDIA LTD, AMMASANDRA
TEST REPORT FOR MYCEM**

REF.: HCIL/QA/2016/5

DATE : 03.03.2016

WEEK NO. : 5

HCIL(AMS)-QCD-F026
29-01-2016 to 04-02-2016

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS455:1989
(A) CHEMICAL COMPOSITION		
(i) Magnesia (MgO), % by mass	8.48	10.0 Maximum
(ii) Insoluble Residue, % by mass	1.50	4.0 Maximum
(iii) Sulphuric Anhydride (SO ₃) % by mass	2.66	3.0 Maximum
(iv) Sulphide Sulphur (S)	0.31	1.5 Maximum
(v) Loss on Ignition % by mass	2.16	5.0 Maximum
(vi) Total Chloride (Cl), % by mass	0.042	0.10 Maximum
(B) PHYSICAL TESTING		
1. Fineness of Cement		
Sp.Surface blaine (m ² /Kg)	342	225 m ² /kg minimum
2. Soundness		
Le-Chatelier Expansion (mm)	3.0	10 mm Maximum
Autoclave Expansion (%)	0.30	0.8 % Maximum
3. Setting Time		
Initial (in Minutes)	110	Not less than 30 minutes
Final (in Minutes)	220	Not more than 600 minutes
4. Compressive Strength (MPa)		
(a) At 72 ± 1 Hrs.	24.2	16 MPa Minimum
(b) At 168 ± 2 Hrs.	34	22 MPa Minimum
(c) At 672 ± 4 Hrs.	51	33 MPa Minimum

Remarks :

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


Mgr (QC)