

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

REF.: HCIL/QA/2020/45

DATE : 09.12.2020

HCIL(AMS)-QCD-F026

WEEK NO. : 45

11/4/2020 to 11/10/2020

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS455:2015
(A) CHEMICAL COMPOSITION		
(i) Magnesia (MgO), % by mass	4.85	10.0 Maximum
(ii) Insoluble Residue, % by mass	0.80	4.0 Maximum
(iii) Sulphuric Anhydride (SO ₃) % by mass	2.36	3.5 Maximum
(iv) Sulphide Sulphur (S)	0.31	1.5 Maximum
(v) Loss on Ignition % by mass	2.11	5.0 Maximum
(vi) Total Chloride (Cl), % by mass	0.0443	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)	1.0	10 mm Maximum
Autoclave Expansion (%)	0.12	0.8 % Maximum
3. Setting Time		
Initial (in Minutes)	110	Not less than 30 minutes
Final (in Minutes)	210	Not more than 600 minutes
4. Compressive Strength (MPa)		
(a) At 72 ± 1 Hrs.	23.6	16 MPa Minimum
(b) At 168 ± 2 Hrs.	33.6	22 MPa Minimum
(c) At 672 ± 4 Hrs.	53.4	33 MPa Minimum

Remarks :

- Physical Lab Temperature during testing - 27 ± 2° C
- Portland Slag Cement conforms to the requirement of **IS 455:2015** in all respects.



Mgr (QC)