

For Better Building

DIAMOND CEMENTS, (Prop. HEIDELBERGCEMENT INDIA LTD)

MADORA, JHANSI UNIT

TEST REPORT FOR MYCEM

Portland Pozzolana Cement as per IS1489 (Part 1):2015

HCIL(JHS)-QCD-F-028

REF.: DC/JHN/QA/2021/04

DATE-05/03/2021

WEEK NO. : 04

(22.01.2021-28.01.2021)

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS1489 (Part 1):2015
(A) CHEMICAL COMPOSITION		
(i) Loss on Ignition % by mass	2.27	5.0, Max.
(ii) Magnesia (MgO), % by mass	2.61	6.0, Max.
(iii) Sulphuric Anhydride (SO ₃) % by mass	2.10	3.5, Max.
(iv) Total Chloride (Cl), % by mass	0.014	0.1, Max.
(v) Insoluble Material, % by mass	33.34	X +{4.0(100-X)/100} Max. and 0.6x Min. (Where X is the declared % of Fly Ash in the PPC sample)
(B) PHYSICAL TESTING		
1. Fineness of Cement		
Sp.Surface blaine (m ² /kg)	354	300 m ² /kg minimum
2. Soundness		
Le-Chatelier Expansion (mm)	0.500	10 mm, Max.
Autoclave Expansion (%)	0.088	0.8 %, Max.
3. Setting Time		
Initial (in Minutes)	170	30 minutes, Min.
Final (in Minutes)	215	600 minutes, Max.
4. Compressive Strength (MPa)		
(a) At 72 ± 1 Hrs.	24	16 MPa, Min.
(b) At 168 ± 2 Hrs.	35	22 MPa, Min.
(c) At 672 ± 4 Hrs.	48	33 MPa, Min.
5. Drying Shrinkage (%)	0.035	0.15 %, Max.
6. Declared % of Fly Ash in PPC	34.00	15 - 35 %

Remarks :

1. Temperature during testing - 27 ± 2° c.
2. The amount of Fly Ash in the finished cement is not varying more than ± 3% from the declared value.
3. Portland Pozzolana Cement conforms to the requirement of IS 1489 (Part 1):2015 in all respects.

Saurav

Head of Quality Control - Jhansi