

**HEIDELBERGCEMENT****mycem**

For Better Building

**DIAMOND CEMENTS,(Prop. HEIDELBERGCEMENT INDIA LTD)****MADORA,JHANSI UNIT****TEST REPORT FOR MYCEM**

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

HCIL(JHS)-QCD-F-028

REF.: DC/JHN/QA/2020/41

DATE-20/11/2020

WEEK NO. : 41

( 07.10.2020-13.10.2020)

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS1489 (Part 1):2015
<b>(A) CHEMICAL COMPOSITION</b>		
(i) Loss on Ignition % by mass	2.24	5.0, Max.
(ii) Magnesia (MgO), % by mass	2.60	6.0, Max.
(iii) Sulphuric Anhydride (SO <sub>3</sub> ) % by mass	2.14	3.5, Max.
(iv) Total Chloride (Cl), % by mass	0.014	0.1, Max.
(v) Insoluble Material, % by mass	33.36	X + {4.0(100-X)/100} Max. and 0.6x Min. (Where X is the declared % of Fly Ash in the PPC sample)
<b>(B) PHYSICAL TESTING</b>		
<b>1. Fineness of Cement</b>		
Sp.Surface blaine (m <sup>2</sup> /kg)	352	300 m <sup>2</sup> /kg minimum
<b>2. Soundness</b>		
Le-Chatelier Expansion (mm)	1.000	10 mm, Max.
Autoclave Expansion (%)	0.091	0.8 %, Max.
<b>3. Setting Time</b>		
Initial (in Minutes)	175	30 minutes, Min.
Final (in Minutes)	215	600 minutes, Max.
<b>4. Compressive Strength (MPa)</b>		
(a) At 72 ± 1 Hrs.	22	16 MPa, Min.
(b) At 168 ± 2 Hrs.	32	22 MPa, Min.
(c) At 672 ± 4 Hrs.	46	33 MPa, Min.
<b>5. Drying Shrinkage (%)</b>	0.035	0.15 %, Max.
<b>6. Declared % of Fly Ash in PPC</b>	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.

Head of Quality Control - Jhansi