

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/2019/44

DATE-16/12/2019

WEEK NO. : 44

(29.10.19-4.11.19)

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS1489 (Part 1):2015
(A) CHEMICAL COMPOSITION		
(i) Loss on Ignition % by mass	2.24	5.0, Max.
(ii) Magnesia (MgO), % by mass	2.61	6.0, Max.
(iii) Sulphuric Anhydride (SO ₃) % by mass	2.13	3.5, Max.
(iv) Total Chloride (Cl), % by mass	0.011	0.1, Max.
(v) Insoluble Material, % by mass	33.37	$X + \{4.0(100 - X)/100\}$ 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 (%)	0.091	0.8 %, Max.
3. Setting Time		
Initial (in Minutes)	175	30 minutes, Min.
Final (in Minutes)	220	600 minutes, Max.
4. Compressive Strength (MPa)		
(a) At 72 ± 1 Hrs.	24	16 MPa, Min.
(b) At 168 ± 2 Hrs.	34	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 - $27 \pm 2^\circ \text{c}$.
2. The amount of Fly Ash in the finished cement is not varying more than $\pm 3\%$ 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