



TEST CERTIFICATE FOR JK LAKSHMI 43 GRADE OPC

LICENCE NO . CM/L-2361143



WEEK No.

8

DATE OF ISSUE 04.03.2016

CHEMICAL / PHYSICAL REQUIREMENTS	SPECIFICATION CLAUSE No.	REQUIREMENT AS PER IS No. 8112 – 2013 AMENDMENT No. 6	RESULTS OBTAINED
	5		
 CHEMICAL REQUIREMENTS : # (i) Ratio of Percentage of Lime to # percentage of silica, alumina and iron oxide CaO - 0.7SO₃ 	5.1	Not Greater than 1.02 And not less than 0.66	0.923
$2.8 \operatorname{SiO}_2 + 1.2 \operatorname{Al}_2 \operatorname{O}_3 + 0.65 \operatorname{Fe}_2 \operatorname{O}_3$			
(ii) Ratio of percentage of alumina to that # of iron oxide	5.1	Not less than 0.66	1.54
(iii) Insoluble residue, percent by mass #	5.1	Not more than 4.0	2.62
(iv) Magnesia, percent by mass #	5.1	Not more than 6.0	2.42
v) Total sulphur calculated as Sulphuric Anhydride (SO ₃), Percent by mass #	5.1	Not more than 3.5	2.30
(vi) Total loss on ignition #	5.1	Not more than 5%	2.25
(vii) Chloride, percent by mass #	5.1	Not more than 0.1	0.040
PHYSICAL REQUIREMENTS :	6		
(i) FINENESS : SP. SURFACE	6.1	Not less than 225 m2/kg	278
(ii) SOUNDNESS : a) Le-chatelier method Expansion C NO T 0720	6.2	Not more than 10 mm	1.00
C.NO.T-0720 b) Auto clave test expansion		Not more than 0.8%	0.060
(iii) SETTING TIMEa) Initial Setting time in Minutes	6.3	Not less than 30	130
b) Final setting time in Minutes		Not more than 600	180
(iv) COMPRESIVE STRENGTH 72 ± 1 Hours (3 Days)	6.4	Not less than 23 MPa	33.0
168 ± 2 Hours (7 Days)		Not less than 33 MPa	41.0
672 ± 4 Hours (28 Days)		Not less than 43 MPa * Not more than 58 MPa	Under Testing

 Test Protocol : IS:4032 and IS:4031.
 # Not covered under NABL Accreditation at present

 Note : Results reported above are the average test results of all samples testing during relevant week.

CERTIFIED ISO 9001:2008 ISO 14001:2004 OHSAS 18001:2007

Steel

HOD (QC)

