

Cement Division Unit of Kesoram Industries Ltd
VASAVADATTA CEMENT UNIT, SEDAM

An ISO 9001 / ISO 14001 / IS 18001 Certified Company

TEST CERTIFICATE

53 GRADE
ORDINARY PORTLAND CEMENT
TEST & COMPLIANCE

Week No.: 5

Date: 05-Mar-2022

PARTICULARS OF TEST CARRIED OUT	TEST RESULTS	REQUIREMENTS OF IS : 269:2015
CHEMICAL ANALYSIS :		
1. LIME SATURATION FACTOR		
$\frac{\text{CaO} - 0.7 \text{ SO}_3}{2.8 \text{ SiO}_2 + 1.2 \text{ Al}_2 \text{ O}_3 + 0.65 \text{ Fe}_2 \text{ O}_3}$	0.91	0.80 Min. 1.02 Max.
2. Ratio of % Alumina to that of Iron Oxide $\text{Al}_2 \text{ O}_3 / \text{Fe}_2 \text{ O}_3$	1.32	0.66 Min.
3. Insoluble Residue (% by mass)	1.90	5.0 Max.
4. Magnesia (% by mass)	1.21	6.0 Max.
5. Sulphuric Anhydride (% by mass)	1.98	3.5 Max.
6. Total Loss on Ignition (%)	2.34	4.0 Max.
7. Chloride (%)	0.01	0.10 Max.
PHYSICAL ANALYSIS		
1. Fineness (m ² /Kg)	288	225 Min.
2. <u>Setting Time (Minutes)</u>		
a) Initial	160	30 Min.
b) Final	220	600 Max.
3. <u>Soundness</u>		
a) Le-chatlier Expansion (mm)	1.00	10 Max.
b) Auto Clave(%)	0.12	0.8 Max.
4. <u>Compressive Strength (M Pa)</u>		
a) 72 +/- 1h (3 Days)	34.80	27 Min.
b) 168 +/- 2h (7 Days)	44.80	37 Min.
c) 672 +/- 4h (28 Days)	60.20	53 Min.
5. Normal Consistency (%)	28.00	
6. Performance Improver Added (%)		
a) Lime Stone	5.00	5.0 Max.
b) Fly Ash		

THE ABOVE CEMENT COMPLIES WITH IS 269:2015 FOR 53 GRADE ORDINARY PORTLAND CEMENT



HOD (QC)