

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 .:25

Date: 02-Jul-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 $\text{Al}_2 \text{ O}_3 / \text{Fe}_2 \text{ O}_3$	1.30	0.66	Min.
3. Insoluble Residue (% by mass)	1.95	5.0	Max.
4. Magnesia (% by mass)	1.18	6.0	Max.
5. Sulphuric Anhydride (% by mass)	2.15	3.5	Max.
6. Total Loss on Ignition (%)	1.72	4.0	Max.
7. Chloride (%)	0.01	0.10	Max.
PHYSICAL ANALYSIS			
1. Fineness (m ² /Kg)	289	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(%)	0.13	0.8	Max.
4. <u>Compressive Strength (M Pa)</u>			
a) 72 +/- 1h (3 Days)	35.40	27	Min.
b) 168 +/- 2h (7 Days)	45.10	37	Min.
c) 672 +/- 4h (28 Days)	Awaited	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

M. Mahapatra
HOD (QC)