

# VASAVADATTA CEMENT UNIT, SEDAM

An ISO 9001 / ISO 14001 / IS 18001 Certified Company

## Test Certificate

# BIRLA SHAKTI CEMENT

## 53 GRADE ORDINARY PORTLAND CEMENT

### Test & Compliance

Week No.

Date :

**PARTICULARS OF TEST CARRIED OUT**

3

**TEST RESULTS OBTAINED**

**REQUIREMENTS OF IS 12269 : 2013**

**CHEMICAL ANALYSIS**

1. LIME SATURATION FACTOR $\text{CaO} - 0.7 \text{SO}_3$	0.90	0.80	1.02
$2.8 \text{SiO}_2 + 1.2 \text{Al}_2\text{O}_3 + 0.65 \text{Fe}_2\text{O}_3$			
2. Ratio of % Alumina to that of Iron Oxide $\text{Al}_2\text{O}_3 / \text{Fe}_2\text{O}_3$	1.44	0.66	Min.
3. Insoluble Residue (% by mass)	1.40	4.0	Max.
4. Magnesia (% by mass)	1.22	6.0	Max.
5. Sulphuric Anhydride (% by mass)	1.85	3.5	Max.
6. Total Loss on Ignition (%)		4.0	Max.
7. Chloride (%)	1.20	0.10	Max.

**PHYSICAL ANALYSIS**

1. Fineness ( $\text{m}^2 / \text{Kg}$ )	0.02	225	Min.
2. Setting Time (Minutes)	295		
a) Initial		30	Min.
b) Final	170	600	Max.
3. Soundness	265		
a) Le-Chat Expansion (mm)	1.00	10	Max.
b) Auto Clave (%)	0.14	0.8	Max.
4. Compressive Strength (M Pa)			
a) $72 \pm 1 \text{ h}$ (3 Days)	38.80	27	Min.
b) $168 \pm 2 \text{ h}$ (7 Days)	Awaited	37	Min.
c) $672 \pm 4 \text{ h}$ (28 Days)	Awaited	53	Min.

THE ABOVE CEMENT COMPLIES WITH IS 12269 : 2013 FOR 53 GRADE ORDINARY PORTLAND CEMENT

HOD (Production & Quality Control)

