

# 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<sub>37</sub>

Date : 14/10/2016

#### PARTICULARS OF TEST CARRIED OUT

#### TEST RESULTS OBTAINED

#### REQUIREMENTS OF IS 12269 : 2013

#### CHEMICAL ANALYSIS

1. LIME SATURATION FACTOR CaO - 0.7 SO <sub>3</sub>	0.90	0.80	1.02
2.8 SiO <sub>2</sub> + 1.2 Al <sub>2</sub> O <sub>3</sub> + 0.65 Fe <sub>2</sub> O <sub>3</sub>			
2. Ratio of % Alumina to that of Iron Oxide Al <sub>2</sub> O <sub>3</sub> / Fe <sub>2</sub> O <sub>3</sub>	1.38	0.66	Min.
3. Insoluble Residue (% by mass)	1.40	4.0	Max.
4. Magnesia (% by mass)	1.20	6.0	Max.
5. Sulphuric Anhydride (% by mass)	1.80	3.5	Max.
6. Total Loss on Ignition (%)	1.05	4.0	Max.
7. Chloride (%)	0.01	0.10	Max.

#### PHYSICAL ANALYSIS

1. Fineness (m <sup>2</sup> / Kg)	292	225	Min.
2. Setting Time (Minutes)			
a) Initial	170	30	Min.
b) Final	265	600	Max.
3. Soundness			
a) Le-Chat Expansion (mm)	1.00	10	Max.
b) Auto Clave (%)	0.13	0.8	Max.
4. Compressive Strength (M Pa)			
a) 72 ± 1 h (3 Days)		27	Min.
b) 168 ± 2 h (7 Days)	38.10	37	Min.
c) 672 ± 4 h (28 Days)	47.50	53	Min.
	61.30		

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

  
HOD (Production & Quality Control)

