

# VASAVADATTA CEMENT UNIT, SEDAM

An ISO 9001 / ISO 14001 / IS 18001 Certified Company

## Test Certificate

# BIRLA SHAKTI CEMENT

## 43 GRADE ORDINARY PORTLAND CEMENT

### Test & Compliance

Week No. 37

#### PARTICULARS OF TEST CARRIED OUT

#### TEST RESULTS OBTAINED

Date : 14/10/2016  
REQUIREMENTS OF IS 8112 : 2013

#### CHEMICAL ANALYSIS

##### 1. LIME SATURATION FACTOR

CaO - 0.7 SO<sub>3</sub>

0.89

0.66 -- 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>

1.35

##### 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>

0.66 -- Min.

##### 3. Insoluble Residue (% by mass)

1.72

4.0 Max.

##### 4. Magnesia (% by mass)

1.20

6.0 Max.

##### 5. Sulphuric Anhydride (% by mass)

1.75

3.5 Max.

##### 6. Total Loss on Ignition (%)

1.12

5.0 Max.

##### 7. Chloride (%)

0.02

0.10 Max.

#### PHYSICAL ANALYSIS

##### 1. Fineness (m<sup>2</sup>/ Kg)

266

225 Min.

##### 2. Setting Time (Minutes)

a) Initial

170

30 Min.

b) Final

260

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)

32.80

23 Min.

b) 168 ± 2 h (7 Days)

43.20

33 Min.

c) 672 ± 4 h (28 Days)

55.30

43 Min.

58 Max.

THE ABOVE CEMENT COMPLIES WITH IS 8112 : 2013 FOR 43 GRADE ORDINARY PORTLAND CEMENT

  
HOD (Production & Quality Control)

