

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. 3

Date : 19/02/201

PARTICULARS OF TEST CARRIED OUT

TEST RESULTS OBTAINED

REQUIREMENTS OF IS 12269 : 2013

CHEMICAL ANALYSIS

1. LIME SATURATION FACTOR

$\frac{\text{CaO} - 0.7 \text{ SO}_3}{2.8 \text{ SiO}_2 + 1.2 \text{ Al}_2 \text{ O}_3 + 0.65 \text{ Fe}_2 \text{ O}_3}$

0.90

0.80 1.02

2. Ratio of % Alumina to that of Iron Oxide

$\frac{\text{Al}_2 \text{ O}_3}{\text{Fe}_2 \text{ O}_3}$

1.39

0.66 Min.

3. Insoluble Residue (% by mass)

1.56

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

4.0 Max.

7. Chloride (%)

0.01

0.10 Max.

PHYSICAL ANALYSIS

1. Fineness (m^2/Kg)

293

225 Min.

2. Setting Time (Minutes)

a) Initial

175

30 Min.

b) Final

270

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)

38.20

27 Min.

b) 168 ± 2 h (7 Days)

48.50

37 Min.

c) 672 ± 4 h (28 Days)

61.00

53 Min.

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

HOD (Production & Quality Control)

