



CM/L-5710037013

**JSW CEMENT LTD.,  
SALBONI, WEST MIDNAPORE,  
WESTBENGAL**

**TEST CERTIFICATE FOR PORTLAND SLAG CEMENT**

| S.No. | Characteristics                       | Requirement as Per IS 455:2015 | Test Result |
|-------|---------------------------------------|--------------------------------|-------------|
|       | <b>CHEMICAL REQUIREMENTS</b>          | % Max.                         |             |
| 1     | Magnesium Oxide (% MgO)               | 10.0                           | 5.02        |
| 2     | Sulphur Trioxide (% SO <sub>3</sub> ) | 3.5                            | 1.73        |
| 3     | Sulphide Sulphur (% S)                | 1.5                            | 0.16        |
| 4     | Loss On Ignition (%)                  | 5.0                            | 1.50        |
| 5     | Insoluble Residue (%)                 | 4.0                            | 1.16        |
| 6     | Chlorides (%)                         | 0.1                            | 0.006       |
|       | <b>PHYSICAL REQUIREMENTS</b>          |                                |             |
| 1     | Fineness (M <sup>2</sup> /Kg)(Min)    | 225                            | 372         |
| 2 a   | Normal Consistency (%)                |                                | 31.50       |
| b     | Setting Time (minutes)                |                                |             |
|       | a) Initial(Min)                       | 30                             | 160         |
|       | b) Final(Max)                         | 600                            | 265         |
| 3     | Soundness                             |                                |             |
|       | a) Le-chatelier (mm)(Max)             | 10                             | 1.000       |
|       | b) Auto Clave (%) (Max)               | 0.8                            | 0.027       |
| 4     | Compressive Strength (MPa)            |                                |             |
|       | a) 72 ± 1h (3 days)(Min)              | 16                             | 20.70       |
|       | b) 168 ± 2h(7 days)(Min)              | 22                             | 28.70       |
|       | c) 672 ± 4h (28 days)(Min)            | 33                             | 45.10       |

**Remarks:** Temperature during testing is 27+/-2degree centigrade.  
Specific Gravity: -2.96

**WEEK NO: 28**  
**09.07.2023 – 15.07.2023**

**JSW CEMENT Ltd.**

*Authorized Signatory*