



NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS  
INDEPENDENT TESTING LABORATORIES, HYDERABAD



C.No.T-0953

**TEST CERTIFICATE**

Sample	: Said to be OPC-53 Gr	Condition of sample	: Satisfactory
Customer's Name & Address	: M/s. Emami Cement Ltd., Works: Vill. Risda, Suhela Road, Baloda Bazar, Dist.Baloda Bazar (C.G.)- 493 332		
Laboratory Mark	: TSH-160242	Identification	: Yr Ltr dated 06.06.2016
Date of performance of Test	: 15.06.2016 to 20.06.2016	Date of Receipt	: 08.06.2016
Tested as per	: IS: 4032-1985 & IS:12803-1989	Specification	: IS :12269-2013
Sl.No	Tests Carried Out		Results Obtained

**CHEMICAL ANALYSIS**

	<b><u>Constituents Determined</u></b>		<b><u>Percentage by Weight</u></b>
1	Loss on Ignition	.. ..	1.21
2	Silica (SiO <sub>2</sub> )	.. ..	19.35
3	Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	.. ..	4.11
4	Alumina (Al <sub>2</sub> O <sub>3</sub> )	.. ..	4.56
5	Calcium Oxide (CaO)	.. ..	62.12
6	Magnesia (MgO)	.. ..	4.83
7	Sulphuric Anhydride (SO <sub>3</sub> )	.. ..	2.42
8	Insoluble Residue	.. ..	0.60
9	Total Chlorides	.. ..	0.011
10	<u>CaO - 0.7 SO<sub>3</sub></u>	.. ..	0.97
	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>		
11	Ratio of percentage of alumina to that of iron oxide	.. ..	1.11

**Conditions:**

1. Results given above refer only to the sample supplied.
2. This report is being issued on the specific understanding that NCB will not in any way be involved in any action following interpretation of the above results.
3. This report shall not be reproduced except in full without written approval from NCB.
4. Corresponding requirements in accordance with recognized standards are available from NCB on specific request.
5. The balance quantity of the tested sample wherever possible shall be retained only for a period of **Two months** from the date of issue of the Test Certificate.

-- End --

*Rave*  
(V. RAMA)

*T. Mohan Rao*  
T. MOHAN RAO  
MANAGER  
Authorised Signatory  
Centre for Cement Research  
and Independent Testing