

Laboratory **Master Marine Services Pvt. Ltd., Jai Prakash Complex, Ring Road Junction No. 1, NH 6, Telibandha, Raipur, Chhattisgarh**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-8059**

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Validity **03.11.2018 to 02.11.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I.	SOLID FUELS			
1.	Coal	Proximate Analysis		
		Total Moisture	IS 1350 (Part 1)	4 % to 40 %
		Equilibrated Moisture	IS 1350 (Part 1)	1 % to 15 %
		Air-dried Moisture	IS 1350 (Part 1)	1 % to 20 %
		Ash	IS 1350 (Part 1)	3 % to 60 %
		Volatile Matter	IS 1350 (Part 1)	10 % to 45 %
		Fixed Carbon	IS 1350 (Part 1)	By Difference
		Total Sulphur	IS 1350 (Part 1)	0.05 % to 6 %
		Gross Calorific Value	IS 1350 (Part 2)	(1000 to 8000) kcal/kg
II.	ORES & MINERALS			
1.	Iron Ore	Total Iron	IS 1493	25 % to 65 %
		Silica	IS 1493	0.5 % to 20 %
		Phosphorus	IS 1493	0.015 % to 2 %
2.	Manganese Ore	Manganese	IS 1473	18 % to 55 %
		Iron	IS 1473	2 % to 20 %
		Silica	IS 1473	0.5 % to 20 %
		Phosphorus	IS 1473	0.015 % to 20 %
3.	Dolomite and Lime Stone	Calcium Oxide	IS 1760 (Part 3)	10 % to 55 %
		Magnesium Oxide	IS 1760 (Part 3)	2 % to 30 %
		Loss on Ignition	IS 1760 (Part 1)	40 % to 50 %
		Silica	IS 1760 (Part 2)	0.5 % to 20 %