

Centre for Quality Management, Standards and Calibration Services (CQC)
NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS

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**REFERENCE MATERIAL (RM)/CERTIFIED REFERENCE MATERIAL (CRMs)/
 BHARATIYA NIRDESHAK DRAVYA (BND)**

CRM/BND /RM No.	Material	Parameter
5001	Ordinary Portland Cement	Blaine's fineness & Specific gravity (Fineness : 250 - 300 m ² /kg)
5021	Ordinary Portland Cement	Blaine's fineness & Specific gravity (Fineness : 320 - 360 m ² /kg)
5011	Ordinary Portland Cement	Blaine's fineness & Specific gravity (Fineness : 400 - 450 m ² /kg)
5002	Portland Pozzolana Cement	Blaine's fineness & Specific gravity
5003	Portland Slag Cement	Blaine's fineness & Specific gravity
5004	Fly Ash	Blaine's fineness & Specific gravity
5006	Composite Cement	Blaine's fineness & Specific gravity
5007	White Portland Cement	Blaine's fineness & Specific gravity
5008	Blast Furnace Slag	Blaine's fineness & Specific gravity
5009	Ordinary Portland Cement	Residue on 45 µm sieve (wet sieving)
5051	Ordinary Portland Cement	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Mn ₂ O ₃ , TiO ₂ , SO ₃ , IR, Na ₂ O, K ₂ O & Cl
5052	Portland Pozzolana Cement	LOI, MgO, SO ₃ , IR, Na ₂ O, K ₂ O & Cl
5053	Portland Slag Cement	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Mn ₂ O ₃ , TiO ₂ , P ₂ O ₅ , SO ₃ , Na ₂ O, K ₂ O, Cl, Sulphur & IR
5054	Fly Ash	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , Cl, Na ₂ O & K ₂ O
5055	Composite Cement	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , IR, Na ₂ O, K ₂ O & Cl
5056	Limestone	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Mn ₂ O ₃ , TiO ₂ , P ₂ O ₅ , Na ₂ O, K ₂ O, SO ₃ & Cl
5057	Raw Meal	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , Na ₂ O, K ₂ O, Cl, Mn ₂ O ₃ & TiO ₂
5058	Clinker	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , Na ₂ O, K ₂ O, Cl, Mn ₂ O ₃ & TiO ₂
5059	Ground Granulated Blast Furnace Slag	GOL, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , IR, Na ₂ O, K ₂ O, TiO ₂ , Mn ₂ O ₃ & Sulphide sulphur
5061	Pet coke	Ash content, Volatile matter, Sulphur & Calorific value
5091	Coal	Ashcontent, Volatile matter, Sulphur & Calorific value (values based on dried basis)

CRM/BND/ RM No.	Material	Parameter
1010	Hydrated Lime (for LR test)	CaO, MgO, SiO ₂ , IR & specific gravity
1041	Red Ochre	SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ & CaO
1039	Laterite	SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , Na ₂ O, & K ₂ O
1040	Silica Fume	LOI, SiO ₂ , Na ₂ O, & K ₂ O
1007	Gypsum	Combined water, SiO ₂ + Acid insoluble, Fe ₂ O ₃ +Al ₂ O ₃ , CaO, MgO, SO ₃ & NaCl
1013	White Portland Cement	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, SO ₃ , Na ₂ O, K ₂ O & Cl
1011	Clay	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Mn ₂ O ₃ , TiO ₂ , P ₂ O ₅ , Na ₂ O & K ₂ O
1002D	Calcined Clay Pozzolana	Blaine's fineness & Specific gravity
1036	Ordinary Portland Cement	Residue on 90 μm (Dry Sieving)
1037	Fly ash (1 pack) for ROS: i) 45 μm (wet sieving)	Quantity: 2 × 100 g
1044	Iron Ore	SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Na ₂ O & K ₂ O
1045	Bauxite	LOI, SiO ₂ , Fe ₂ O ₃ , Al ₂ O ₃ , CaO, MgO, Na ₂ O, K ₂ O, Cl, TiO ₂ , Mn ₂ O ₃ & P ₂ O ₅