



PRODUCT TECHNICAL DATA SHEET

POWERMAX CEM II 42.5N

Mfamosing Plant

Product Description

Powermax cement is a Portland-limestone cement product manufactured in accordance with, and certified to BS EN 197-1 and NIS 444-1. This product is marketed as CEM II /A-L 42.5N. Powermax cement is a premium technical cement that combines excellent strength performance at all ages with versatility and enhanced durability benefits.

Composition

In compliance with the chemical composition requirements specified in BS EN 197- 1 the product has a clinker content ranging between 80 and 94 by cement mass, limestone addition content ranging between 6 and 20 by cement mass and less than 5% of cement mass of calcium sulphate (gypsum).

Standard Requirements (BS EN 197-1)

Chemical Requirements

Magnesium Oxide (MgO)	≤ 5
Sulphates (SO ₃)	≤ 3.5
Chlorides (Cl ⁻)	< 0.1

Physical Requirements

Initial Setting Time (IST)	≥ 60 mins
Soundness	≤ 10 mm

Mechanical Requirements

Compressive Strength	2 days	≥ 10 MPa
	28 days	≥ 42.5 MPa

Applications

Powermax cement offers effective solutions to the requirements of a wide range of specialist and other applications.

- High Strength Concrete: Rapid demoulding and construction speed is required e.g. bridges and high rise building.
- Large Projects: Where projects require large pours with low heat of hydration and enhanced long term durability e.g. Dam, Reservoir Construction, Massive Beams, Columns and Slabs.
- Foundation: It is suitable for all types of foundation works, due to its fast setting and low porosity, it is especially suited for foundations where the water table is high.

Advantage

The **POWERMAX** advantage includes:

- Consistent quality
- Improved workability
- Reduced bleeding
- Reduced Porosity
- Improved Cohesion
- Smoother Surface Finish
- Low Heat of Hydration (reducing thermal cracking)

Storage Condition / Shelf-Life

Minimum of 6 months from date of production if stored properly in original unopened, sealed and undamaged packaging in cool and dry conditions at temperatures between +15°C and +35°C. Protect from direct sunlight and humidity.

Health, Safety & Environment

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

Use proper engineering controls, work practices, and personal protective equipment to prevent exposure to wet or dry Powermax Cement.

The use of basic PPE like hand gloves, nose mask, safety glasses and safety shoes are very important.

Packaging

Available in 50Kg bag, 2 tons jumbo bag and 30 tons bulk tanker.

For professional use only, the user is advised to conduct tests and assessments in order to define the suitability of the product for the intended application.

For Information:

Technical Assistance

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