



PRODUCT TECHNICAL DATA SHEET

LAFARGE ROADCEM

Ewekoro Plant

Product Description

Lafarge RoadCem is a Portland-limestone cement product manufactured in accordance with, and certified to BS EN 197-1 and NIS 444-1.

Lafarge RoadCem is used for stabilization of different soil types especially coarse-grained and gravelly soils, by improving the soil bearing capacity and mechanical properties. With the addition of RoadCem there is reduction in the liquid limit, the plasticity index and the potential for volume change of soil that distort road constructions.

Composition

In compliance with the chemical composition requirements specified in BS EN 197- 1 the product has a clinker content ranging between 65 and 79 by cement mass, limestone addition content ranging between 21 and 35 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)	≥ 75 mins
Soundness	≤ 10 mm

Mechanical Requirements

Compressive Strength	7 days	≥ 16 MPa
	28 days	≥ 32.5 MPa

Applications

Lafarge RoadCem is typically delivered in 50Kg bags for convenience and ease of handling. The application RoadCem for road stabilization involves the following steps

- **Soil Preparation:** The soil is first prepared by removing vegetation and debris. The soil is then graded to the desired elevation and compaction level.
- **RoadCem Application:** RoadCem is then applied to the soil in dry powder form or as a slurry.
- **Mixing:** The soil and cement are then mixed using a rotary mixer, a pug mill, or a traveling mixing plant. The mixing process creates a homogenous soil, RoadCem and water mixture.
- **Compaction:** The mixture is then compacted using a roller, a plate compactor, or a vibrating compactor.
- **Curing:** The mixture is then allowed to cure for some time to achieve maximum strength.

Advantage

The **LAFARGE ROADCEM** advantage includes:

- Cost-Effective
- Enhanced durable soil that is resistant to erosion and withstand harsh weather conditions.
- Versatility
- Improved Soil Stability
- Faster Construction
- Reduced Maintenance
- Environmentally Friendly Construction

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 Lafarge RoadCem.

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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