PORTLAND CEMENT

CEM I 42,5 R

CE

EN 197-1 0856

Vasco da Gama bridge

Constituents

Clinker ≥ 95%
Additional minor constituents ≤ 5%
Calcium sulfate as setting regulator

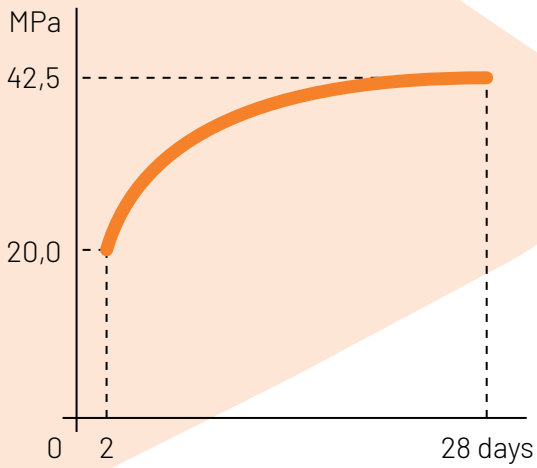
Requirements

- **Chemical**
  Loss on ignition (L.O.I.) ≤ 5,0%
  Insoluble residue (I.R.) ≤ 5,0%
  Sulfate content (SO_3) ≤ 4,0%
  Chloride content (Cl^-) ≤ 0,10%

- **Physical**
  Initial setting time ≥ 60 min
  Soundness ≤ 10 mm

- **Mechanical**
  Compressive strength
  Minimum values
  2 days: 20,0 MPa
  28 days: 42,5 MPa

Compressive strength
Minimum growth curve



Especial features of concrete made with this cement

- High early strength development
- High strength at all standard ages
- Particularly suitable for environmental exposure class XC

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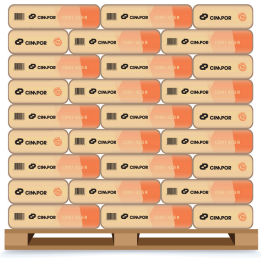
PRODUCT DATA SHEET

Recommended for

- **Reinforced concrete**
  All strength classes, especially those in the range of C30/37 to C45/55
  High performance at 28 days
- **Precast concrete products**
  Reinforced and pre-stressed concrete structural elements
- **Road pavements**
  Concrete surface layers for high traffic roads
- **General purpose grout**

Packaging and Delivery



Single-use plasticized pallet
72 Bags of 25 kg - 1800 kg

30 ton truck with self discharge means and properly sealed

Bulk
±30 tonnes

For exportation purpose, please contact our Sales Department

Precautions regarding use

- Attend the standard minimum cement content and maximum water/cement ratio
- Provide adequate protection and cure according to corresponding standards
- Keep framework and scaffolding in place until required strength is obtained
- Ready-mix concrete: avoid long time transportation
- Hot and dry weather placing

Not recommended for

- Aggressive environments – water and soils
- Mass concrete
- General purpose mortars

Environment and Safety

- Wear proper protective clothing, gloves and eye/face protection equipment
- When bagged it contains Chromium (VI) reducing agent. Its expiration date is two months after the bagging date, as long as the storage conditions stated in the bag are respected
- For more information, check the Safety Data Sheet, available at www.cimpor.com

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