# PRODUCT DATASHEET

PPC SURECAST 42,5 R CEMENT





PPC's SURECAST 42,5 R CEMENT IS A PREMIUM PORTLAND CEMENT THAT IS IDEAL FOR THE MANUFACTURE OF PRECAST CONCRETE PRODUCTS, STRUCTURAL REINFORCED AND PRESTRESSED CONCRETE, AND ANY OTHER APPLICATION WHERE HIGH EARLY STRENGTH IS REQUIRED.

## **Product Description**

SURECAST is a premium Portland cement made by PPC from high quality raw materials. Clinker is inter-ground with gypsum to manufacture a premium high early strength cement.

## **Applications**

A high early strength cement, typical applications are precast concrete products, structural reinforced and prestressed concrete, masonry products, paving, grouts, and shotcrete.

It is a tried and tested product that has been engineered to achieve consistent and appropriate performance.

It is compatible with commercial chemical admixtures and mineral extenders such as GGBS, GGCS and fly ash.

## **Specification**

This cement complies with the 42,5 R strength class of SANS 50197-1 for common cements and is identified as:

• Portland Cement CEM I 42,5 R.

#### **Storage**

Cement bags are not weatherproof and should be stored under cover, off the ground, on raised timber platform or on plastic sheeting to protect against rising dampness. Bags should be stacked to a maximum height of 12 bags or two pallets. Usage of bags should be first in first out.

## **Handling and Safety**

Refer to PPC Safety Data Sheet at www.ppc.co.za

#### **Technical Information**

Typical technical data is supplied below. Further technical information can be obtained from the PPC Cement sales office on (0800) 236 368.

PPC has comprehensively equipped chemical, cement and concrete laboratories and can supply specific information and assistance regarding cement and concrete technology.

## **Typical Properties**

Chemical Composition	Typical Test Results	SANS 50197-1 requirements
Sulphur trioxide: % by mass	2,0	3,5% maximum
Chlorides: % by mass	≤ 0,01	0,1% maximum

Physical Properties	Typical Results	SANS 50197-1 requirements
Setting times: Initial: minutes Final: hours	200 3,5	≥ 60 minutes No requirement
Specific Area (Blaine): m²/kg	400	No requirement
Typical mortar prism results determined in accordance with EN 196-1: Compressive strength at 2 days (MPa) Compressive strength at 28 days (MPa)	± 28 ± 50	≥ 20,0 ≥ 42,5 ≤ 62,5
Soundness: Le Chatelier Expansion (mm)	0	10 maximum
Densities: Relative density Bulk density, aerated, kg/m³ Bulk density, as packed, kg/m³	3,00 1300 1500	
Approximate Volume: 50 kg bag, ℓ	± 33	

Please contact our sales office if actual figures are required.

#### Contact

For sales queries or more information, contact 0800 236 368 or visit www.ppc.co.za

IMPORTANT NOTE: The information and/or specifications contained herein are given in good faith as being true and accurate but no liability is accepted by PPC, its employees, distributors, representatives or agents, for any loss or damage, direct or indirect, resulting from using the information, following the specifications or adopting recommendations and/or suggestions as actual conditions of use are beyond its control.

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