

# product datasheet



**PPC OPC 52,5 N CEMENT**

**OPC IS A PREMIUM PORTLAND CEMENT THAT IS IDEAL FOR A BROAD RANGE OF APPLICATIONS.**

## Product Description

OPC is a premium 52,5N Portland cement that offers more value in every bag. It is ideal for a broad range of applications in the construction, building, readymix, precast and concrete product manufacturing industries where high early and final strengths are required.



## Applications

OPC has been formulated to enable users to produce cost-effective concrete and concrete products. Applications include concrete, grouts, precast products, shotcrete, masonry products and specialist applications. It can also be used in mortar, plaster and screed mixes. OPC is ideal for blending with extenders such as fly ash (FA), ground granulated blast furnace slag (GGBS) and Corex® slag (GGCS). OPC is compatible with commercial chemical admixtures.

## Specification

OPC conforms to the 52,5 N strength class of SANS 50197-1 for common cements and, depending on source factory, is identified as:

- Portland Cement CEM I 52,5 N
- Portland Composite Cement CEM II/A-L 52,5 N

“CEM I” denotes the addition of between 0 and 5 % minor addition constituent.

“CEM II/A-L” denotes the addition of between 6 and 20 % limestone extender.

## Storage

Bulk storage silos should be inspected on a regular basis to ensure that the inspection hatch seal is watertight and filters are clean and unblocked.

Cement bags are not weatherproof and should be stored indoors, tightly packed together under cover, off the ground to a maximum height of 12 bags.

## Handling and Safety

Refer to the PPC Cement Material Safety Data Sheet, obtainable from PPC Cement or the PPC website.

## Availability

OPC is available throughout South Africa and Botswana. Please contact your local sales office for further details.

### JOHANNESBURG

Eastgate 20 (Corner Crayston Drive  
and Katherine Street 148),  
Sandton, 2196  
Tel: 011 386 9000

### CAPE TOWN

Corner of Chain Ave & Montague Drive,  
Montague Gardens, Milnerton  
Tel: 021 550 2100



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## GEORGE

13 Saagmeul Street,  
George Industrial, George  
Tel: 044 871 3024

## NELSPRUIT

Corner of De Villiers and Annecke Streets,  
Sonpark, Nelspruit  
Tel: 013 741 4140

## PPC BOTSWANA

Plot 22034, Takatokwane Way,  
Gaborone West  
Tel: (267) 390 1553

## PIETERMARITZBURG

First Floor, Hayfields Mall,  
Pietermaritzburg  
Tel: 033 386 6171

## POLOKWANE

79 Biccard Street, Domus Building,  
Polokwane, 0699  
Tel: 015 297 2503

## RUSTENBURG

255A Beyers Naude Drive,  
Rustenburg  
Tel: 014 597 0100

## PORT ELIZABETH

Fergusson Road, Off Old Grahamstown Road,  
Deal Party  
Tel: 041 486 2272/3

## Technical Information

Typical technical data is supplied below. Further technical information can be obtained from the PPC Cement help line, toll-free, on 0800236368 (SA only).

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 OPC results for the PPC Group	SANS 50197-1 requirements
Insoluble residue: % by mass	2,0	5,0 maximum
Sulphur trioxide: % by mass	2,0	4,0 maximum
Loss on ignition: % by mass	2,5	5,0 maximum
Chlorides: % by mass	< 0,01	0,1 maximum

Physical Properties	Typical OPC 52,5 N results for PPC Group	SANS 50197-1 requirements
Setting times:		
Initial: minutes	125	45 minimum
Final: hours	2,5	No requirement
Specific Area (Blaine): m <sup>2</sup> /kg	400	No requirement
Compressive strength (mortar prism EN 196-1):		
At 2 days (MPa)	28	≥ 20,0
At 28 days (MPa)	± 58	≥ 52,5 no maximum
Soundness: Le Chatelier Expansion (mm)	1	10 maximum
Densities:		
Relative density	± 3,14	
Bulk density, aerated, kg/m <sup>3</sup>	1100 – 1300	
Bulk density, as packed, kg/m <sup>3</sup>	± 1500	
Approximate Volume: 50 kg bag, ℓ	± 33	

**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.

For more advice on cement please ask your PPC Cement stockist or call the PPC toll-free help line 0800236368 (SA only).



**PPC**

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