PPC CEMENT: OPC 52,5 N

OPC IS A PREMIUM PORTLAND CEMENT THAT IS IDEAL FOR A BROAD RANGE OF APPLICATIONS IN THE CONSTRUCTION, BUILDING, READYMIX, PRECAST AND CONCRETE PRODUCT MANUFACTURING INDUSTRIES, WHERE HIGH EARLY STRENGTH IS REQUIRED.



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.

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 visit www.ppc.co.za.

Supply and Prices

OPC is available nationally and in Botswana. For details of your local sales office, visit www.ppc.co.za or call us on 0800 023 470.

Technical Information

Typical technical data is supplied below. Further technical information can be obtained from the PPC Cement help line, toll-free, on 0800 CEMENT.

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 52,5N results for PPC Group	SANS 50197-1 requirements
Setting times:		
Initial: minutes	125	45 minimum
Final: hours	2,5	No requirement
Specific Area (Blaine): m²/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 ³	1100 – 1300	
Bulk density, as packed, kg/m ³	± 1500	
Approximate Volume: 50 kg bag, ł	± 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 0800 CEMENT (SA only).

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