



**OPC IS AN ORDINARY PORTLAND CEMENT THAT IS IDEAL FOR A BROAD RANGE OF APPLICATIONS IN THE CONSTRUCTION, BUILDING, READYMIX, PRECAST AND CONCRETE PRODUCT MANUFACTURING INDUSTRIES.**

**PRODUCT DESCRIPTION:**

OPC is made from high quality raw materials. The clinker is underground with gypsum to control setting. Grinding is carefully controlled to ensure consistent performance in the 42,5N strength class.

**APPLICATIONS:**

OPC has been engineered to achieve cost effective concrete and concrete products. Applications include concrete, grouts, shot Crete, precast products, masonry products and specialist applications. It can also be used in mortar or plaster mixes.

OPC is most suited for blending with extenders such as fly ash and ground granulated blast furnace slag (GGBS). It is also compatible with commercial chemical admixtures.

**SPECIFICATION:**

OPC is manufactured to SANS 50197-1 for Common Cements in the 42,5N strength class, and is identified as:

- Portland Cement CEM I 42,5N.

This product is in line with requirements given in the NHBRC manual.

**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 under cover, off the ground to a maximum height of 12 bags.

**HANDLING AND SAFETY:**

Refer to PPC Cement Safety Data Sheet, obtainable from PPC.

**SUPPLY:**

OPC is available nationally from all PPC factories and most depots except De Hoek. Please check with your local sales office for further details.

**PRICE:**

PPC Cement sales can be contacted for delivered prices. Contact details are provided below:

**JOHANNESBURG**

P O Box 40073, Cleveland, 2022  
Tel: 011 626 3150  
Fax: 011 626 2560

**PIETERMARITZBURG**

P O Box 28488, Haymarket, 3200  
Tel: 033 386 6171  
Fax: 033 386 3545

**CAPE TOWN**

P O Box 268, Milnerton 7435  
Tel: 021 550 2100  
Fax: 021 550 2111

**POLOKWANE**

P O Box 55491 Polokwane 0700  
Tel: 015 297 2503/1826/0965  
Fax: 015 297 5372

**GEORGE**

P O Box 4961, George East,  
6539  
Tel: 044 871 3024  
Fax: 044 871 3076

**RUSTENBURG**

P O Box 20570, Protea Park,  
Rustenburg, 0305  
Tel: 014 597 0100  
Fax: 014 597 0115

**NELSPRUIT**

P O Box, 7888, Sonpark,  
Nelspruit, 1200  
Tel: 013 741 4140  
Tel: 013 741 4142

**PORT ELIZABETH**

Private Bag X2016, North End, Port  
Elizabeth, 6056  
Tel: 041 486 2272  
Fax: 041 486 2145

Web site: [www.ppc.co.za](http://www.ppc.co.za)

**TECHNICAL INFORMATION:**

Typical technical data is supplied below. Further technical information can be obtained from the PPC Cement help line, toll-free, on 0800-023-470. PPC has comprehensively equipped chemical, cement and concrete laboratories and can supply specific information and assistance regarding cement and concrete technology.

Mix designs are offered as a service to customers.

**TYPICAL PROPERTIES:**

Chemical Composition	Typical OPC results for the PPC Group	SABS EN 197 CEM I 42,5N
Insoluble residue: %	2,0	5,0 maximum
Sulphur Trioxide: %	2,0	3,5 maximum
Loss on Ignition: %	2,5	5,0 maximum
Chloride: %	<0,01	0.1 maximum

**All % calculated by mass.**

Physical Properties	Typical OPC results for the PPC Group	Specification requirements SABS EN 197 Class 42,5N
Setting Times: Initial: Minutes Final: Hours	125 2,5	60 minimum
Specific Surface (Blaine): m <sup>2</sup> /kg	380	--
Fineness: Residue on 212 µm screen: %	0	--

Soundness: Le Chatelier Expansion: mm	1	10 maximum
Typical mortar prism results determined in accordance with EN 196-1 Early strength requirement at 2 days (MPa)		
Standard strength at 28 days (MPa)	$\pm 23$ $\pm 52$	$\geq 10$ $\geq 42,5 \leq 62,5$
Densities:		
Relative density	3,14	
density: kg/m <sup>3</sup>	1300	
Bulk density: kg/m <sup>3</sup>	1500	
Approximate Volumes:		
50kg bag: l	$\pm 33$	

Please contact our toll free help line if actual figures are required.

**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. This data sheet was published in February 2006