

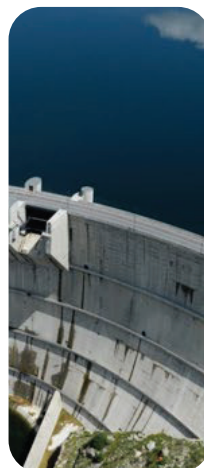
SUPRATEK CEM I 42,5R PORTLAND CEMENT

Production Sites
Secil-Outão Plant

Packaging
25kg sacks
Bulk

Certification

Cement certified according to NP EN 197-1.
Certificate of Performance and Declaration of Performance
0856-CPR-0118 (Secil-Outão)



Product Composition (Cement Core)	95% to 100% Portland Clinker 0% to 5% Other Constituents
Main Characteristics	Grey-coloured, high-heat cement. Very quick development of initial resistance (high initial resistance). Final resistances within the rated class values (resistance at 28 days).
Main Applications	CEM I 42.5R Portland Cement is a high quality, high performance product, widely used in civil engineering works and in the manufacture of high and very high resistance concrete. It is particularly suited to works where a very high resistance is required on the first days after application. The main applications of this cement are: <ul style="list-style-type: none"> • ready-mixed or cast in-situ high and very high initial or final resistance concrete; • high resistance lightweight concrete; • early prestressed concrete; • concrete cast in cold weather; • prestressed lightweight and heavyweight prefabrication with high turnover of moulds and formwork; • sealing and grouting.
Specific Warnings	The correct development of resistance is very sensitive to the curing process. <ul style="list-style-type: none"> • care should be taken to avoid drying of all concreted parts; • concreting in very hot weather should be avoided. <p>This cement enables high mechanical performance concrete to be manufactured, but the prior study of compositions is recommended to achieve the best performance. The use of this cement is compatible with the introduction of latent hydraulicity additions and the use of admixtures is normal to improve workability with a possible reduction in the water/cement ratio.</p>
Safety Notice	Handling powder cement may cause irritation to the eyes or airways. When mixed with water, it can also cause sensitive skin. The use of a dust mask, goggles, safety gloves and overalls is recommended to protect the hands and the skin. For detailed information refer to the Safety Datasheet.



CHEMICAL CHARACTERISTICS

Properties	Testing Method	Specified Value (1)
Loss on Burning	NP EN 196-2	≤ 5,0%
Insoluble Residue	NP EN 196-2	≤ 5,0%
Sulphate Content (in SO ₃)	NP EN 196-2	≤ 4,0%
Chloride Content	NP EN 196-2	≤ 0,10%

(1) The percentages refer to cement paste.

MECHANICAL CHARACTERISTICS

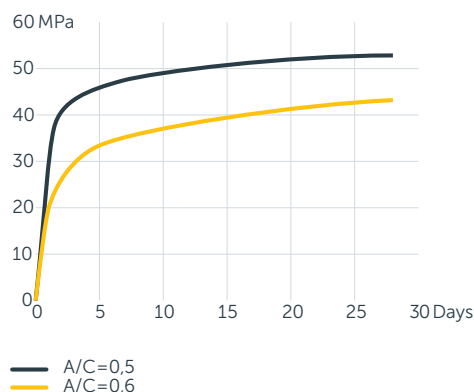
Compressive Strength (MPa)

Resistance during the first days		Reference resistance	NP EN 196-1
2 days	7 days	28 days	
≥ 20	-	≥ 42,5 e ≤ 62,5	

PHYSICAL CHARACTERISTICS

Properties	Testing Method	Specified Value
Start of Setting	NP EN 196-3	≥ 60 min
Expandability	NP EN 196-3	≤ 10 mm

Indicative average values of compressive strength of concrete manufactured with 350 kg/m³ of CEM I 42.5R cement



CUSTOMER SERVICE

CIAC – Customer Information and Service Centre

Av. Eng. Duarte Pacheco, 19, 7^º
1070-100 Lisboa
Tel. +351 808 202 996
apoiocliente@secil.pt

National Sales Directorate

Av. Eng. Duarte Pacheco, 19, 7^º
1070-100 Lisboa
Tel. +351 217 927 100

Resale Sales

Rua da Estrada - Crestins
4470-592 Moreira - Maia
Tel. +351 226 078 410
vendas.revenda@secil.pt

Industry Sales

Apartado 28
2406-909 Maceira - Leiria
Tel. +351 244 779 500
vendas.industria@secil.pt

Large Distribution Sales

Av. Eng. Duarte Pacheco, 19, 7^º
1070-100 Lisboa
Tel. +351 217 927 100