

Description

CEM I 42.5 N SR-3 is a high sulphate resistant Portland cement; it is the result of the grinding of a specially selected high sulphate resisting clinker.

CEM I 42.5 N SR-3 is certified in accordance with the UNE-EN 197-1 standard, with the certificate of consistent performance No. 0099/CPR/A33/1160 issued by AENOR and complies with the requirements of the Tunisian standard NT 47.01.

Value-Added Features

- High resistance to sulfate attack (SR-3) for aggressive soil and marine environments
- Excellent durability in foundations, sewage systems and hydraulic structures
- High mechanical strength with reliable performance
- Low permeability for long-term protection of concrete
- Improved durability and stability in chemically aggressive conditions

Cement Features

	Typical values	Specifications according to standard
Clinker (%)	95 - 97	> 95
CHEMICAL		
Loss on ignition	2.50	≤3
Insoluble residue	0.6	≤0.75 %
Chlorides	0.01	≤0.10 %
Sulphate, SO ₃ (%)	<2.5 - 2.8	≤ 3 %
MgO	1.00 %	≤ 4.0 %
C3A	1 - 2	≤ 3.0
C4AF + 2 C3A	18 - 20	≤ 20%
PHYSICAL		
Expansion (mm)	<5	max. 10
Initial setting time (min.)	180-200	min. 60
MECHANICAL		
2 days compressive strength (MPa)	20-22	min. 10.0
28 days compressive strength (MPa)	48 - 50	min. 42.5

Recommended for

- ✓ Foundations in sulfate-rich or aggressive soils
- ✓ Marine and coastal structures
- ✓ Sewage and wastewater treatment plants
- ✓ Hydraulic structures (dams, canals, reservoirs)
- ✓ Underground works and deep foundations
- ✓ Heavy-duty reinforced concrete requiring high durability

Not Suitable For

- X General non-aggressive construction where sulfate resistance is not required
- X Mass concrete works requiring very low heat of hydration

Shipping and Storage

- Supplied in 50 kg bags, and in bulk.
- Bags should be stored in dry, well-ventilated areas, protected from ground and ambient moisture.
- Bulk cement must be kept in sealed, airtight silos to preserve its quality and performance.

Worksite precautions

Proper curing is essential due to the cement's high reactivity. In hot, cold, dry, or windy conditions, ensure adequate moisture retention and protection to prevent rapid drying, cracking, and to guarantee optimal strength development.

For more information, product specification, Safety data sheet, product quotes, please request it from us.

CUSTOMER SUPPORT:

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