

GREY CEMENT CEM I 42.5 N SR5

STANDARD NA 442 (2013) / CE / EN 197-1 (2011)

STRENGTH AT 28 DAYS

≥ 42.5 MPa

FINENESS

3200 - 3800 cm²/g

PACKAGING

Bulk

UPDATED

May 2026

OVERVIEW

Sulfate-Resistant Portland Cement (SRPC) with high resistance to aggressive environments and low heat of hydration (LH – Low Heat), suitable for all work in environments with high sulphate content. Compliant with the Algerian Standard NA 442-2013 and CE Standard (EN 197-1).

DOMAINS OF APPLICATION

- Construction works requiring high resistance to aggressive environments.
- Massive, continuous concrete work in hot weather that requires low heat of hydration cement (Low Heat) and improved durability.
- Massive structures: ports, bridges, dams, retaining walls, etc.
- Road concrete: extruded concrete for safety barriers.
- Maritime and hydraulic works: concrete for desalination and purification.

CHEMICAL ANALYSIS

Sulphur Trioxide (SO ₃)	< 2.5 %
Chloride content (Cl)	< 0.1 %
Magnesium Oxide (MgO)	< 1 %
Loss On Ignition (LOI)	0.5 - 1.5 %

CLINKER MINERALOGICAL COMPOSITION (BOGUE)

C ₃ S	≥ 60 %
C ₃ A	< 5 %

PHYSICAL PROPERTIES

Normal Consistency	26 to 28 %
Start of setting (minutes)	≥ 60 min
Hot expansion (mm)	< 5 mm
Fineness (SSB)	3200 - 3800 cm ² /g

COMPRESSIVE STRENGTH

7 days (EN 196-1)	≥ 10 MPa
28 days (EN 196-1)	≥ 42.5 MPa

Typical average values.