



AL-WAFAA
FOR TRADING
EGYPTIAN CEMENT EXPORT

PORTLAND POZZOLAN CEMENT (PPC)

CEM II/B-M (P-L) 32.5N

Al-Wafaa Portland Pozzolan Cement (PPC) is produced in Egypt with high quality clinker and natural pozzolana to provide excellent durability, better workability and higher resistance to sulphates and aggressive environments.



HIGH
DURABILITY



SULPHATE
RESISTANT



EXCELLENT
WORKABILITY



LOW HEAT OF
HYDRATION



MEETS INTERNATIONAL
STANDARDS



APPLICATIONS



MASS CONCRETE



FOUNDATIONS



BRIDGES &
VIADUCTS



MARINE
STRUCTURES



PRECAST
CONCRETE



PLASTERING &
MASONRY



SEWAGE &
WATER WORKS

TYPICAL CHEMICAL COMPOSITION (%)

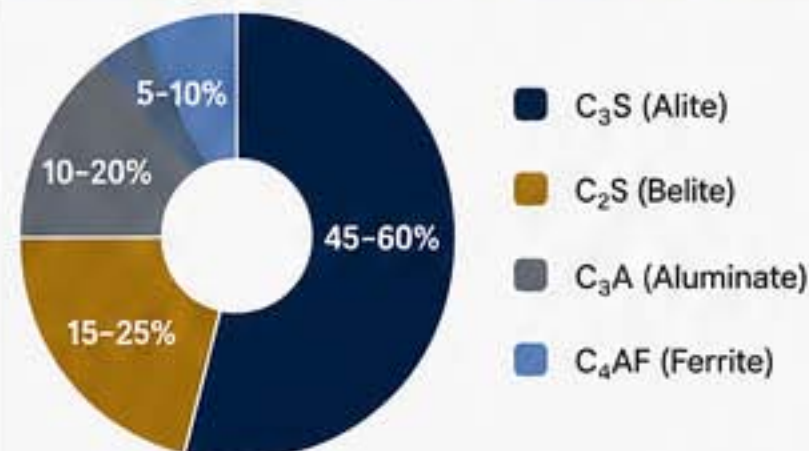
Component	Typical Range	Guaranteed Max.
CaO	50.0 – 60.0	63.0
SiO ₂	18.0 – 22.0	23.0
Al ₂ O ₃	5.0 – 7.0	8.0
Fe ₂ O ₃	2.0 – 4.0	4.5
MgO	1.0 – 3.0	3.5
SO ₃	2.0 – 3.5	3.5
Na ₂ Oeq	≤ 0.60	0.80
Loss on Ignition	≤ 3.5	4.5
Insoluble Residue	≤ 1.5	2.0

PHYSICAL & MECHANICAL PROPERTIES

Property	Requirement (EN 197-1)	Typical Value
Compressive Strength (2 Days)	≥ 10.0 MPa	≥ 14 MPa
Compressive Strength (28 Days)	≥ 32.5 MPa	≥ 42 MPa
Initial Setting Time	≥ 60 min	110 – 160 min
Final Setting Time	≤ 600 min	180 – 240 min
Soundness (Le Chatelier)	≤ 10 mm	1 – 2 mm
Fineness (Blaine)	≥ 300 m ² /kg	350 – 450 m ² /kg
Specific Gravity	—	2.90 – 3.05
Density	—	2.95 – 3.15 g/cm ³

All tests carried out in accordance with EN 197-1 / ASTM C595

TYPICAL COMPOUND COMPOSITION (%)



Balanced compound composition ensures higher durability, better resistance to aggressive conditions and long-term performance.