



AL-WAFAA
FOR TRADING
EGYPTIAN CEMENT EXPORT

SULPHATE RESISTANT CEMENT (SRC)

ASTM TYPE V / EN 197-1 CEM I SR

High performance Sulphate Resistant Cement manufactured in Egypt using selected raw materials to provide superior resistance against sulphate attack and harsh environments.



HIGH SULPHATE
RESISTANCE



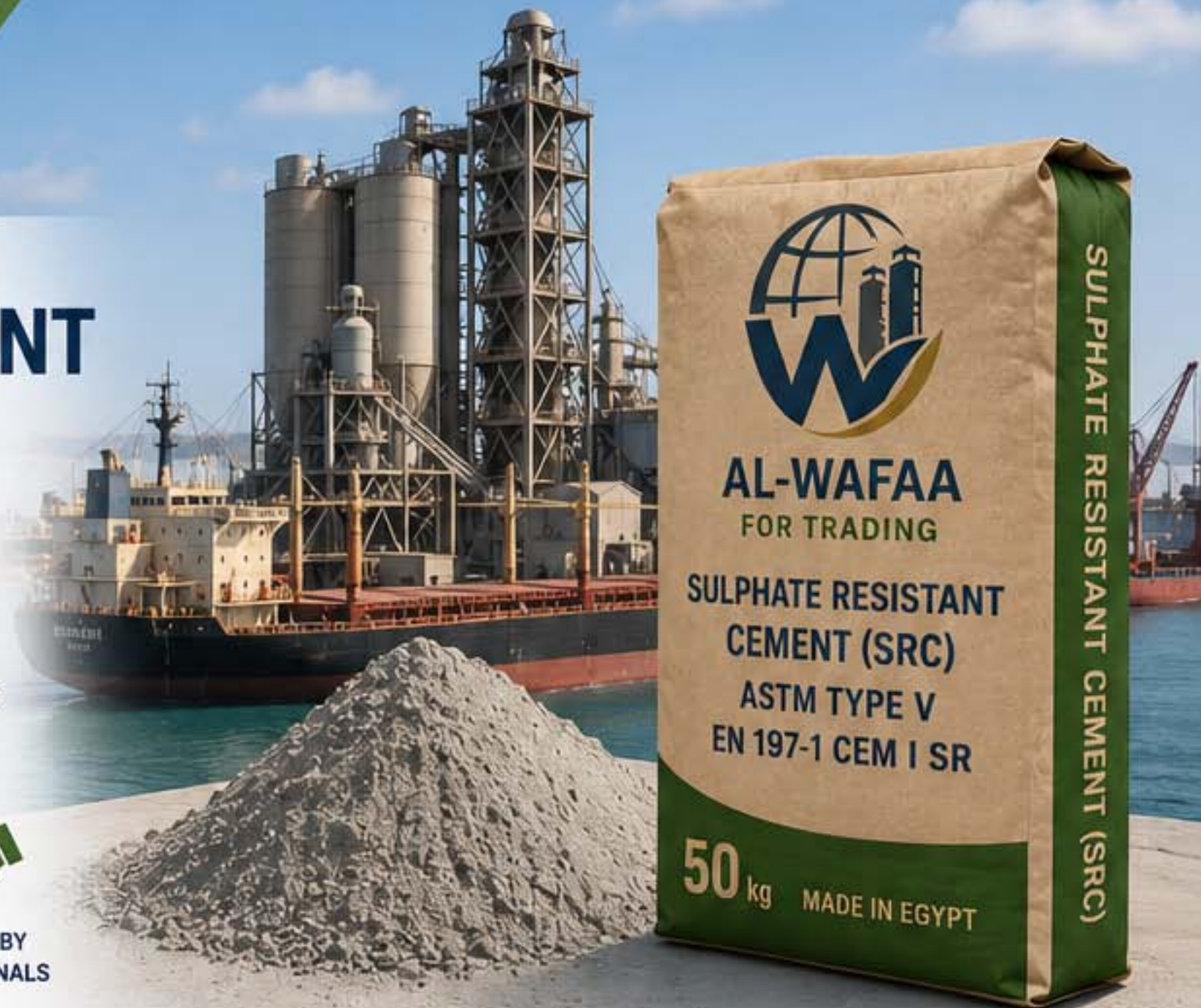
EXCELLENT
DURABILITY



LOW
PERMEABILITY



TRUSTED BY
PROFESSIONALS



APPLICATIONS



MARINE STRUCTURES



WASTEWATER
TREATMENT PLANTS



BRIDGES &
INFRASTRUCTURE



COASTAL & SEA
DEFENSE STRUCTURES



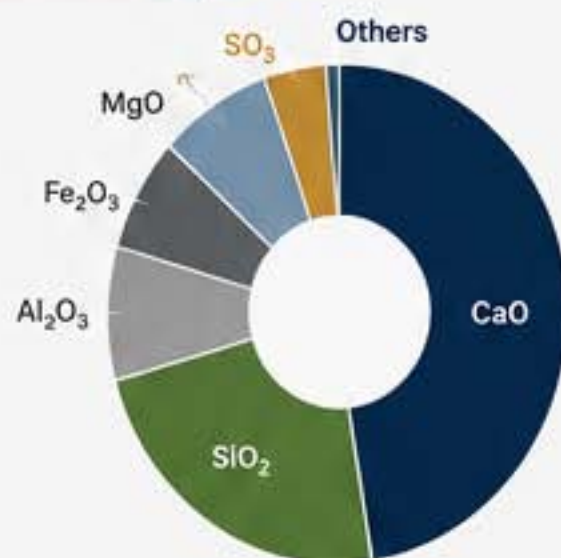
FOUNDATIONS IN
SULPHATE SOILS



INDUSTRIAL & CHEMICAL
ENVIRONMENTS

TYPICAL CHEMICAL COMPOSITION (%)

CaO	60.0 – 64.0
SiO ₂	19.0 – 22.0
Al ₂ O ₃	4.0 – 6.0
Fe ₂ O ₃	2.0 – 4.0
MgO	1.0 – 2.5
SO ₃	1.5 – 2.8
Na ₂ O _{eq}	≤ 0.60
Cl ⁻	≤ 0.10
Insoluble Residue	≤ 1.5
Loss on Ignition	≤ 3.0



PHYSICAL & MECHANICAL PROPERTIES

PROPERTY	REQUIREMENT (ASTM TYPE V / EN 197-1 CEM I SR)	TEST METHOD
Compressive Strength (2 Days)	≥ 20 MPa	ASTM C109 / EN 196-1
Compressive Strength (28 Days)	≥ 42.5 MPa	ASTM C109 / EN 196-1
Initial Setting Time	≥ 60 min	ASTM C191 / EN 196-3
Final Setting Time	≤ 600 min	ASTM C191 / EN 196-3
Soundness (Le Chatelier)	≤ 10 mm	ASTM C151 / EN 196-3
Fineness (Blaine)	≥ 320 m ² /kg	ASTM C204 / EN 196-6
Expansion in 1% Na ₂ SO ₄	≤ 0.10 %	ASTM C1012 / EN 196-3
Sulfate Resistance	High Resistance	ASTM C1012 / EN 196-3