

Property of cement	Typical values	Requirement
1d strength	19...23 MPa	none
2d strength	33...38 MPa	≥ 20.0 MPa
7d strength	43...48 MPa	none
28d strength	50...56 MPa	≥ 42.5 MPa and ≤ 62.5 MPa
Initial setting time	150...200 min	≥ 60 min
Soundness	0...1.5 mm	≤ 10 mm
Fineness (Blaine)	420...500 m <sup>2</sup> /kg	none
Loss of ignition	-	none
Insoluble residue	-	none
Sulfate content SO <sub>3</sub>	3.4...3.8%	≤ 4.0%
Chloride Cl-	≤ 0.08%	≤ 0.10%
Cr6+	0...2 mg/kg	≤ 2 mg/kg

Other main constituents	%	Requirement
Sum of other main constituents	6...15%	≥ 6% and ≤ 20%
Limestone	6...15%	-
Blast furnace slag	0%	-

Chemical properties of clinker	%
CaO	63...65%
SiO <sub>2</sub>	20...22%
Al <sub>2</sub> O <sub>3</sub>	4.7...5.1%
Fe <sub>2</sub> O <sub>3</sub>	3.2...3.4%
MgO	2.7...3.2%