

Quality Certificate of cement

Type of cement : **CEM I 42,5R**

Requirements acc. to: **EN 197-1:2011**

Values obtained for the period of: **June 2022**

	Unit	Results	Requirements acc. to: EN 197-1:2011
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1. Properties (by standards)

Compressive strength			
Early strength, after 2 days	MPa	26,7	≥ 20
Standard strength, after 28 days <small>(results from previous month)</small>	MPa	58,2	≥ 42,5 i ≤ 62,5
Initial setting time	min	165	≥ 60
Expansion of cement	mm	0,5	≤ 10
Sulfate content (as SO ₃)	%	3,35	≤ 4,0
Chloride content Cl ⁻	%	0,077	≤ 0,10
Loss on ignition ^{a)}	%	3,08	≤ 5,0
Insoluble residues ^{a)}	%	0,69	≤ 5,0

2. Additional information

Laser particle size distribution passing 8 μm/32 μm	%	31/74	-
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a) only for CEM I and CEM III

Anna Kozłowska
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Kierownik Jakości

Cementownia Kujawy w Bielawach

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