

Quality Certificate of cement

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

Requirements acc. to: EN 197-1:2011

Values obtained for the period of: **April 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	27,5	≥ 20
Standard strength, after 28 days <small>(results from previous month)</small>	MPa	56,8	≥ 42,5 i ≤ 62,5
Initial setting time	min	155	≥ 60
Expansion of cement	mm	1,0	≤ 10
Sulfate content (as SO ₃)	%	3,28	≤ 4,0
Chloride content Cl ⁻	%	0,085	≤ 0,10
Loss on ignition ^{a)}	%	2,87	≤ 5,0
Insoluble residues ^{a)}	%	0,81	≤ 5,0

2. Additional information

Laser particle size distribution passing 8 μm/32 μm	%	28/74	-
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a)only for CEM I and CEM III

Anna Kozłowska
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 Cementownia Kujawy w Bielawach

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