

## Quality Certificate of cement

Type of cement : **CEM II/A-V 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	25,3	≥ 20
Standard strength, after 28 days <small>(results from previous month)</small>	MPa	56,3	≥ 42,5 i ≤ 62,5
Initial setting time	min	175	≥ 60
Expansion of cement	mm	0,5	≤ 10
Sulfate content (as SO <sub>3</sub> )	%	2,77	≤ 4,0
Chloride content Cl <sup>-</sup>	%	0,053	≤ 0,10
Loss on ignition <sup>a)</sup>	%	-	-
Insoluble residues <sup>a)</sup>	%	-	-

### 2. Additional information

Laser particle size distribution passing 8 µm/32 µm	%	31/71	-
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<sup>a)</sup>only for CEM I and CEM III*Anna Kozłowska*Kierownik Jakości  
  
Cementownia Kujawy w Bielawach.....  
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