



PRODUCT DESCRIPTION

OP/G50/2021/1 dated 1st April 2021

CALCIUM ALUMINATE CEMENT

GÓRKAL 50

GENERAL CHARACTERISTICS

GÓRKAL 50 is hydraulic binder for refractory and building applications. Fast strength development (80% in 12h from preparation) and short setting time are advantages of **GÓRKAL 50** cement. **GÓRKAL 50** material is manufactured and controlled with respect to PN-EN 14647 norm.

APPLICATION

Thanks to stable phase composition with perfect mechanical properties **GÓRKAL 50** can be use in building chemistry mortars and concrete as well as part of refractory insulation pulps or other monolithic products.

CHEMICAL COMPOSITION

GÓRKAL 50 principal components:

component	Typical values [%]
Al ₂ O ₃	50 - 55
CaO	<36
SiO ₂	<4
Fe ₂ O ₃	<10

The characteristics have been determined by classical analysis

MINERALOGICAL COMPOSITION

Principal phases: CA
Secondary phase: CA₂, C₄AF, C₁₂A₇, C₂AS
This information is just given as rough one.

SPECIAL PROPERTIES

GÓRKAL 50 is characterised by some special features:

Specific surface acc. to Blaine	3400 - 3900 cm ² /g
Refractoriness	≥146 sP
Density	3,0 g/cm ³
Bulk density	1,1 g/cm ³

HYDRAULIC PROPERTIES

GÓRKAL 50 hydraulic properties:

	Typical values [minutes]
Initial setting time	>90
Final setting time	<480

Determined acc. to EN-196-3

MECHANICAL PROPERTIES

GÓRKAL 50 is characterised by following mechanical strengths:

Cold Crushing Strength after 6h	>18 MPa
Cold Crushing Strength after 24h	>45 MPa

*The mixture composition is: 1350 g French sand
500 g cement
200 g water*

Determined acc. to EN-196-1

SHELF LIFE

If stored properly, in dry conditions, the **GÓRKAL 50** shelf-life can be 12 months. Please, contact GÓRKA CEMENT R&D, Technical Sales Support Department for more precise details, if required.