PRODUCT DESCRIPTION



OP/G50+/2022/11 dated 1st November 2022

CALCIUM ALUMINATE CEMENT

GÓRKAL 50+

GENERAL CHARACTERISTICS

GÓRKAL 50+ is hydraulic binder for refractory and building applications. It is characterized by low Fe_2O_3 content. Fast strength development and short setting time are advantages of **GÓRKAL 50+** cement. **GORKAL 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	51 - 55
CaO	<38
SiO ₂	≤5
Fe ₂ O ₃	<3

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 $3000 - 3500 \text{ cm}^2/\text{g}$ Common refractoriness $\geq 146 \text{ sP}$ Density $3,0 \text{ g/cm}^3$ Bulk density $1,1 \text{ g/cm}^3$

HYDRAULIC PROPERTIES

GÓRKAL 50+ hydraulic properties:

	Typical values [minutes]
Initial setting time	>220
Final setting time	<600

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 from production date. Please, contact GÓRKA CEMENT R&D, Technical Sales Support Department for more precise details, if required.