



PRODUCT DESCRIPTION

OP/G50+/2020/12 dated 1st December 2020

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. **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_2O_3	51 - 55
CaO	<38
SiO_2	<5
Fe_2O_3	<3

The characteristics have been determined by classical analysis

MINERALOGICAL COMPOSITION

Principal phases: CA
Secondary phase: CA_2 , C_4AF , C_{12}A_7 , C_2AS
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 cm^2/g
Common 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	>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.