



PRODUCT DESCRIPTION

OP/G70F/2022/12 dated 1st December 2022

HIGH ALUMINA CEMENT

GÓRKAL 70F

GENERAL CHARACTERISTICS

GÓRKAL 70F is hydraulic binder with high content of Al_2O_3 . The material was created to offer the refractory Customers high refractoriness parameter and followed by **shorter than regular GÓRKAL 70** setting time. It is important to mention that the material is **chemically pure** cement.

APPLICATION

Thanks to high purity and very good refractoriness the **GÓRKAL 70F** can be used in variety refractory products especially in gunning, shotcreting applications.

CHEMICAL COMPOSITION

GÓRKAL 70F principal components:

component	Typical values [%]
Al_2O_3	69 - 71
CaO	28 - 30
SiO_2	<0,5
Fe_2O_3	<0,3
$Na_2O + K_2O$	<0,5

The characteristics have been determined by classical analysis

MINERALOGICAL COMPOSITION

Principal phases: CA, CA_2
Secondary phase: $C_{12}A_7$, αA
This information is just given as rough one.

SPECIAL PROPERTIES

GÓRKAL 70F is characterised by some special features:

Specific surface acc. to Blaine	4000 - 4500 cm^2/g
Refractoriness	≥ 158 sP
Density	3,0 g/cm^3
Bulk density	1,1 g/cm^3

HYDRAULIC PROPERTIES

GÓRKAL 70F hydraulic properties:

	Typical values [minutes]
Initial setting time	≥ 75
Final setting time	<160

*The mixture composition is: 1350 g French sand
450 g cement
225 g water*

MECHANICAL PROPERTIES

GÓRKAL 70F is characterised by following mechanical strengths:

Cold Flexural Strength after 24h	>5 MPa
Cold Crushing Strength after 24h	>30 MPa

*The mixture composition is: 1350 g French sand
450 g cement
225 g water*

SHELF LIFE

If stored properly, in dry conditions, the **GÓRKAL 70F** shelf-life can be 6 months. Please, contact GÓRKAL CEMENT R&D, Technical Sales Support Department for more precise details, if required.