



## PRODUCT DESCRIPTION

OP/G70F/2020/12 dated 1<sup>st</sup> December 2020

### 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:  $C_{12}A_7$ ,  $\alpha A$   
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	$\geq 158$ 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 GÓRKA CEMENT R&D, Technical Sales Support Department for more precise details, if required.