



PRODUCT DESCRIPTION

CALCIUM ALUMINATE CEMENT

GÓRKAL 40

GENERAL CHARACTERISTICS

GÓRKAL 40 is hydraulic binder for refractory and building applications. Fast strength development and short setting time are advantages of **GÓRKAL 40** cement. **GÓRKAL 40** works very well under the sulphur aggression (sea water) and in carbon monoxide atmosphere. **GÓRKAL 40** can be applied at minus temperature (e.g. -10°C). **GÓRKAL 40** material manufactured and controlled with respect to PN-EN 14647 norm.

APPLICATION

Thanks to stable phase composition with perfect mechanical properties **GÓRKAL 40** can be use in building chemistry mortars and concrete as well as part of refractory castables or shapes products.

CHEMICAL COMPOSITION

GÓRKAL 40 principal components:

component	Typical values [%]
Al ₂ O ₃	>41
CaO	>35,5
SiO ₂	<4
Fe ₂ O ₃	<15

The characteristics have been determined by classical analysis

MINERALOGICAL COMPOSITION

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

SPECIAL PROPERTIES

GÓRKAL 40 is characterised by some special features:

Specific surface acc. to Blaine	3100 - 3800 cm ² /g
Refractoriness	≥128 sP
Density	3,0 g/cm ³
Bulk density	1,1 g/cm ³

HYDRAULIC PROPERTIES

GÓRKAL 40 hydraulic properties:

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

Determined acc. to EN-196-3

MECHANICAL PROPERTIES

GÓRKAL 40 is characterised by following mechanical strengths:

Cold Crushing Strength after 6h	>30 MPa
Cold Crushing Strength after 24h	>50 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 40** shelf-life can be 12 months. Please contact Górka Cement Development, Quality and Controls Department for details of storage.