

CRYSTACAL ALPHA K

Arts & Decoration / Artistic

PRODUCT DESCRIPTION

Crystacal Alpha K is a formulated hemihydrate plaster ($\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$) produced from naturally occurring high purity gypsum mineral. It is off-white in colour. It is used for the production of fine detailed and high strength giftware and models.

PRODUCT BENEFIT

- + Exceptionally high strength and surface hardness
- + Low expansion
- + Excellent reproduction of detail
- + Supplied in plastic drums
- + Shelf life of 12 months



TECHNICAL INFORMATION

Plaster to Water Ratio

Plaster to Water Ratio (by weight)	4.76:1
Water to plaster ratio (by weight)	21%
Plaster to water mix ratio (by weight)	100/21

Chemical Properties

Chemical Name	Calcium sulphate hemihydrate
Chemical Composition	$\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$
Colour	White
Colorimeter L* value	92
Colorimeter a* value	0.4
Colorimeter b* value	3.5

Setting Parameters

Initial setting time (minutes)	25
Final setting time (minutes)	28
Linear Expansion (%)	0,12

Mechanical Properties

Brinell Hardness (MPa)	400
Dry compressive strength (Mpa)	97
Wet Compressive strength (Mpa)	55

Physical Properties

Particle Size (% weight retained)	0.0 % at 63 μm 1% at 32 μm
Loose bulk density (kg/m^3)	900
Bulk density (compacted) kg / m^3	1350

The technical data outlined represents typical figures only. For further details, please contact Saint-Gobain Formula directly.

INSTRUCTION FOR USE

Please use with the recommended plaster water ratio, with a mixing time of approx. 2 to 4 minutes or with a mix until homogenous.

The precise consistency to use will need to be adjusted to suit the individual application. Changes to plaster to water ratio will influence product performance particularly setting time and strength.

PACKAGING AND SHELF LIFE

	Packaging Available	Shelf Life (month)
Drum	25 kg	12

When stored under dry conditions and in its original packaging, the product will have a specified shelf life that commences from the date of manufacture that is displayed on each sack. Shelflife depends on the packaging type. For those products where a defined 'best before' date is applicable, BBE (Best Before End) followed by the date will be displayed on each sack.

STORAGE

Plaster based products are not recommended for conditions where they are likely to be located externally or in any way subjected to weathering or excessive dampness.

Absorption of moisture can result in changes to physical properties, including a reduction in the set strength of plasters and also a lengthening of setting time.

Gypsum minerals can be affected by absorption of moisture and may change physical properties.

To help protect the product during use, open or part used bags should be carefully folded and closed. Each bag is date stamped and stocks should be rotated so that the oldest material is used first.

ENVIRONMENT, HEALTH AND SAFETY

Material Safety Data Sheets of Saint-Gobain

Formula plasters and gypsum minerals are available for all products and may be obtained directly on our website in the [product](#) and [documentation](#) sections.

No liability is accepted by Saint-Gobain Formula for injury to any person or loss or damage to property by improper use of the product.

NOTIFICATION

The plaster to water ratios quoted are those used in Saint-Gobain Formula's standard test methods and are not necessarily those used in practice.

The precise consistency to use will need to be adjusted to suit the individual application. Changes to plaster to water ratio will influence product performance, particularly setting time and strength.

Unless otherwise stated, Saint-Gobain Formula's standard test methods apply. To obtain a copy of the test method, please contact Saint-Gobain Formula directly.

This literature cancels and replaces any previous document. All information given is provided in good faith and may be subject to change.

It's advisable to contact Saint-Gobain Formula in case of any doubt arising from the content of such information.

CONTACT

For any information, please visit our website

www.saintgobainformula.com



SALES CONTACT



DOCUMENTATION



TECHNICAL
INFORMATION



GLOBAL
INFORMATION