

# CRYSTACAL R

## Fibrous and Decorative Plaster



### PRODUCT DESCRIPTION

Crystacal R 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 white in colour. This product is used to make hard casts with fine reproduction of detail. It is used in the manufacture of glass reinforced gypsum structures, decorative plasterwork, giftware and dental models

### PRODUCT BENEFITS

- + Produces hard casts with good reproduction of fine detail
- + Shelf life of 9 months

## TECHNICAL INFORMATION

Plaster to Water Ratio	
Plaster to Water Ratio (by weight)	2.86:1
Water to plaster ratio (by weight)	35%
Plaster to water mix ratio (by weight)	100/35
Chemical Properties	
Chemical Name	Calcium sulphate hemihydrate
Chemical Composition	$\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$
Colour	white
Colorometer L* value	92.5
Colorometer a* value	0.5
Colorometer b* value	3.5
Setting Parameters	
Initial setting time (minutes)	15
Final setting time (minutes)	18
Linear Expansion (%)	0.4
Mechanical Properties	
Brinell Hardness (MPa)	190
Dry compressive strength (Mpa)	55
Wet Compressive strength (Mpa)	28
Physical Properties	
Particle Size (% weight retained)	0.0 % at 63 $\mu\text{m}$ 15% at 32 $\mu\text{m}$
Loose bulk density ( $\text{kg/m}^3$ )	1100
Compacted bulk density ( $\text{kg/m}^3$ )	1500

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

## INSTRUCTIONS 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)
Bag	25 kg	9 months

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. Shelf life 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.

## CERTIFICATION



DoP n° NK001

## 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](http://www.saintgobainformula.com)*



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