

NEWCAST 71

Ceramics



PRODUCT DESCRIPTION

Newcast 71 is a formulated hemihydrate plaster used in the ceramic industry. It is used to produce working moulds for the slip casting of tableware and sanitaryware. The product gives excellent surface aspect and a good absorption capability. It can also be used to produce working moulds for jiggering in tableware. This product can be used with both conventional batch mixing systems as well as automatic continuous plaster blending machines.

PRODUCT BENEFITS

- + Fine particle size
- + Excellent surface smoothness
- + Good balance between absorption and mould life

APPLICATIONS

Sanitaryware, Tableware

TECHNICAL INFORMATION

Plaster to Water Ratio	
Plaster to Water Ratio (by weight)	1.52:1
Water to plaster ratio (by weight)	66%
Plaster to water mix ratio (by weight)	100/66
Chemical Properties	
Chemical Name	Calcium sulphate hemihydrate
Chemical Composition	$\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$
Colour	Off white
Setting Parameters	
Vicat Ring Fluidity (cm)	19
Initial setting time (minutes)	8
Final setting time (minutes)	11
Linear Expansion (%)	0.23
Mechanical Properties	
Brinell Hardness (MPa)	28
Dry compressive strength (Mpa)	15
Wet Compressive strength (Mpa)	7
Pore Volume (%)	40%
Physical Properties	
Particle Size (% weight retained)	2% at 90 μm 5% at 63 μm 25% at 32 μm
Loose bulk density (kg/m ³)	700
Compacted bulk density (kg/m ³)	1100

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

INSTRUCTIONS FOR USE

The recommended mixing time is approx. 2 to 4 minutes, depending on batch size. 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, strength and permeability. Depending on quality and preparation, the clay has a varying tendency to stick to the mould. Therefore the pwr may be adjusted within the above ranges. Depending on the quantity, the tendency to stick increases as the pwr increases. When inserting on the press, the lowest ratio should be tested first, followed by increasing increments to determine the optimum ratio.

PACKAGING AND SHELF LIFE

	Packaging Available	Shelf Life (Month)
Bag	25 kg	6

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.

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

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