

HELIODUR 40

Ceramics

PRODUCT DESCRIPTION

Heliodur 40 is a very high strength formulated plaster used to produce working moulds for the automatic forming of clay in tableware applications.

PRODUCT BENEFITS

- + Designed for jiggering
- + Controlled expansion
- + Very high strength

APPLICATIONS

Tableware

TECHNICAL INFORMATION

Plaster to Water Ratio	
Plaster to Water Ratio (by weight)	2.13:1
Water to plaster ratio (by weight)	47%
Plaster to water mix ratio (by weight)	100/47
Chemical Properties	
Chemical Name	Calcium sulphate hemihydrate
Chemical Composition	CaSO ₄ ·1/2H ₂ O
Colour	Off-white
Setting Parameters	
Vicat Ring Fluidity (cm)	17-22
Initial setting time (minutes)	13-19
Linear Expansion (%)	0.23
Mechanical Properties	
Flexural Strength (MPa)	7.6
Brinell Hardness (MPa)	50
Dry compressive strength (Mpa)	22.3
Physical Properties	
Pore Volume (%)	34%
Particle Size (% weight retained)	0.04% at 200 µm 4% at 90 µm

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

INSTRUCTIONS FOR USE

The recommended plaster to water ratio is between 1.82:1 and 2.13:1, with a mixing time of approx. 2 to 4 minutes, depending on batch size and plaster shop process. Water and Plaster must be measured carefully to ensure constant performances. 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.

PACKAGING AND SHELF LIFE

	Packaging Available	Shelf Life (Month)
Bag	25 kg, 50 kg	6
Bulk Bag	1 T	6
Bulk tanker	25 T	Technical properties noted are at receipt of goods.

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.

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.

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.

CONTACT

*For any information, please visit our website
www.saintgobainformula.com*



*Sales
contact*



Documentation



*Technical
information*



*Global
information*