Limepor 100 GEL

ST8-0622

Injection mixture with pseudoplastic consistency (gel)

DESCRIPTION

Limepor 100 GEL is a mortar for injections containing natural hydraulic lime NHL.
This mix has been specially designed for the restoration and pre-consolidation of rubble-filled walls and brick or stone foundations by means of injection techniques.
It is used for the grouting of connectors made with Kimisteel INOX 800 stainless steel fiber fabric or Kimisteel GLV 650 galvanized steel in masonry structures.
The product is added with specific thickener additives in order to achieve a pseudoplastic (gel) behavior.
Limepor 100 GEL has low water-soluble salt content and it can be injected into cracks or cavities using any kind of pump with special injectors. It is CE marked in compliance with EN 998-2.
Limepor 100 GEL is part of Kimitech BS ST 200 SYSTEM, Kimitech BS ST 400 SYSTEM, Kimisteel INOX 800 SYSTEM e Kimisteel GLV 650 M SYSTEM which got the CVT n. 207.

ADVANTAGES

- High breathability.
- Physically and chemically compatible with the original components of walls with similar mechanical properties.

USES

Limepor 100 GEL is used for the restoration and pre-consolidation of ancient brick or flint walls by means of injecting with low pressure injection systems.
It is used for the grouting of connectors made with Kimisteel INOX 800 stainless steel fiber fabric or Kimisteel GLV 650 galvanized steel in masonry structures.

WORKS

- Create and apply galvanized steel or stainless steel connectors (**SA136**)

APPLICATION

Pourable – gel consistency	Workability time of the fresh mortar: 195 ± 30 mins
	Mixing water: 5,5-6,5 lt/ 20Kg

Limepor 100 GEL must be mixed with water in the quantity shown in the table.
Add 3/4 of water required into the mixer, then add the product and the remaining water continuously until you obtain the consistency required.
No other component than the mixing water must be added to the product during preparation and application.
Limepor 100 GEL must be injected into walls by means of normal electric or manual low-pressure pumps, using injectors fixed into the holes and proceeding from the lower holes towards the upper ones.
Do not remix by adding water to the product when it has already started to set. With frescoed walls, use **Limepor IZ8** and contact our Technical Department for support.

CONSUMPTION

1,5 Kg/dmc
Absorption per cubic metre of masonry: about 80-190 kg depending on the size of the cavities in the wall.

PACKAGING

Bag 25 Kg.

STORAGE

Protect from humidity. Store in a dry, sheltered place.
In these conditions the product remains stable for 12 months.

Characteristics	Typical value
Appearance	Powder
Colour	Light grey-hazel shades
Type of binder (EN 459-1)	NHL 3.5 and NHL 5
Application temperature C°	+2 - +35 °C
pH in water dispersion	11,5 -12,5
Maximum inert material size EN 1015-1	0,09 mm
Soluble salts, sulphates, nitrates, chlorides content (Normal 13/83)	< 1.5% Of which chlorides < 0,03%
Resistance to sulphates	No resistance loss for specimens immersed for 90 days in Na_2SO_4 solution at 5%
Resistance to sulphates Anstett-Le Chatelier edited (internal procedure)	Clamping aperture: <10 mm; the product has high resistance to sulfur attack
Workability time of fresh mortar EN 1015-9	195 ± 30 mins
Bleeding UNI 480-4	None
Elastic modulus EN 13412	~ 5000 MPa
Compressive strength EN 1015-11	in 7 days > 10 Mpa in 14 days > 12 MPa in 28 days > 15 MPa
Flexural strength EN 1015-11	in 7 days > 2 Mpa in 14 days > 2,5 MPa in 28 days > 3,5 MPa

Characteristics	Limits EN 998-2	Typical value
Chlorides content [%] EN 1015-17	Declared value	≤ 0,1
Compressive strength in 28 dd EN 1015-11 [MPa]		> 15
First shear resistance [MPa] In combination with masonry elements compliant to EN 771		0,15 [Table value]
Absorption of water for capillarity EN 1015-18		0,4
Permeabilty to water-vapour EN 1745		15/35 [Table value]
Reaction to fire class		A1
Hazardous substances		See the safety data sheet

WARNING

Product for professional use. The use of natural raw materials may result in natural color variations from one production lot to another.

Before using, check bags have not been damaged, and do not use the product if there are any lumps.

CE marking obligations are not correlated to the nature of the product, but to the intended use of the specific product. Before proceed with the order, it is mandatory for the client to submit all the necessary documentation to the Work Director or Project Manager in charge of the approbation concerning the use of such materials.

For further information and advice on safe handling, storage and disposal of chemical products, the user must refer to the most recent Safety Data Sheet, containing physical, ecological, toxicological and other data related to safety. All technical data shown in this Technical Data Sheet are based on laboratory tests. Actual measurement data may vary due to circumstances beyond our control. The information and requirements indicated in this Technical Data Sheet are based on our current knowledge and experience and are to be considered, in any case, purely indicative. They cannot guarantee the final result of the applied product and they have to be confirmed by exhaustive practical applications; therefore the user must test the suitability of the product for the intended application and its purpose. Users must always refer to the latest version of the local technical data sheet related to the product.