



Limepor LGS

ST14-0221

Natural Hydraulic Lime based product to be mixed with aggregates in order to obtain mortars for plasters and masonry structures.



DESCRIPTION

Limepor LGS is a fibre reinforced product made out of NHL. Mixed with an appropriate ratio of washed sand of a suitable granulometry and water, **Limepor LGS** creates masonry mortars that can be used for plasters/renders, in break-fill jobs, stucco work and pointing of brick or stone facades. In contact with water, the hydraulic lime reacts to form hydrated products that are extremely insoluble and very stable in terms of the chemical base.

It is a CE marked product for interior and exterior plasters, as GP CS III, in compliance with the 998-1.

ADVANTAGES

- Excellent colour effect.
- Physically and chemically compatible with the components used in the masonry.
- Low water-soluble salt content.

USES

Limepor LGS, mixed with local sands of suitable granulometry and colour, is suitable for patching methods, tiling of terracotta or stone facades, screeds.

WORKS

- Internal and external plasters with binder mixed with sand (**SA47**).
- Traditional screed occasionally walkable (**SA8**).
- Renovation of masonry with break-fill system (**SA52**).
- Repointing work of cotto tiled and exposed stones with binder mixed with sand (**SA71**).

APPLICATION

	Manual application		Normal setting time : 120 ± 30 mins
	Mechanical device application		

Limepor LGS has to be mixed on site with drinking water and washed aggregates with a suitable granulometry and colour; the quantity is about 300 kg/m³ depending on the application (see table).

The minimum amount of mixing water possible must be added, depending on the humidity of the inert materials: excess water will impair the final performance of the product.

We recommend you to add 3/4 of the water required in the mixer then gradually add the remaining amount until you get the right consistency. Mix carefully until you get a smooth mixture.

Surfaces to be treated should be compact, cleaned thoroughly with a high pressure washer and damped to saturation point without leaving any excess water. Apply with normal manual or mechanical tools. Do not remix by adding water to the product when it has already started to set. **Limepor LGS** must be applied to clean, dust-free surfaces with no loose parts or traces of paint, grease or any other material that may impair its bonding power.

CONSUMPTION

300 Kg/mc of mortar

PACKAGING

20 kg multilayer paper bags.

STORAGE

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

Use	Aggregate	Dosage of binder mix
Screeds	Gravel from 0 to 8mm	300 Kg/m ³
Mortar bed	Gravel from 0 to 5mm	350-500 Kg/m ³
Rendering mortar	Gravel from 0 to 5mm	350-500 Kg/m ³
Plasters	Sand from 0 to 3mm	350-500 Kg/m ³

Characteristics	Value
Appearance	Powder
Colour	Beige - hazel
Application temperature	+2 - +35 °C
pH in water dispersion	11,5 - 12,5
Maximum inert material size EN 1015-1	0,09 mm
Curing time EN 196-3 start setting	120 ± 30 mins
Curing time EN 196-3 end setting	230 ± 30 mins
Bleeding UNI480-4	None
Compressive strength in 7 dd EN 196-1	> 1,7 MPa
Compressive strength in 28 dd EN 196-1	> 3,9 MPa
Flexural strength in 7 dd EN 196-1	> 0,6 MPa
Flexural strength in 28 dd EN 196-1	> 1,2 MPa

Characteristics	Limit value for GP mortars	Value
Compressive resistance at 28 days EN 1015-11	CS I (0,4 – 2,5 Mpa) CS II (1,5 – 5 Mpa) CS III (3,5–7,5 Mpa) CS IV (≥ 6 Mpa)	CS III
Adhesion EN 1015-12	Declared value	> 0,6 N/mm ² - FP: B
Capillar water absorption EN 1015-18	Declared value	W0
Coefficient of permeability of water vapour EN 1015-19	Declared value	μ ≤ 15
Thermal conductivity I _{10, dry, mat} values EN 1745	Avarga value as per table (P = 50%)	0,62 W/m*K
Reaction to fire EN 13501 - 1	Declared value	A1
Durability	Declared value	NPD

Characteristics of mixture made of 300 Kg/m ³ of binder*	Value
Compressive strength in 7 dd EN 196-1	> 4,4 MPa
Compressive strength in 14 dd EN 196-1	> 6,0 MPa
Compressive strength in 28 dd EN 196-1	> 8,4 MPa
Flexural strength in 7 dd EN 196-1	> 1,2 MPa
Flexural strength in 14 dd EN 196-1	> 1,5 MPa
Flexural strength in 28 dd EN 196-1	> 2,1 MPa

*mixture for the production of screeds with 300 Kg / m³ of binder, 7% mixing water, with standard sand.

WARNING

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

If the product is not covered, use only material from the same batch of production and organize the installation in continuity or, if not possible, apply the product for environments defined by clean cuts in correspondence with string courses, edges, etc..

Only use enough water to obtain the right mix. Before using, check bags have not been damaged, and do not use the product if there are any lumps. Use the entire contents once the bag has been opened. Do not apply Limepor LGS to surfaces with loose, flaky parts: contact our technical support service for assistance. Do not apply at temperatures under +2 °C, to surfaces in direct sunlight, when it is about to rain, or on windy or misty days.

The manufacturer shall not be liable for any damage to the equipment resulting from an improper use of the material.

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.

TECHNICAL SPECIFICATIONS

SK47 - Internal and external plasters with binder mixed with sand

SK8 - Traditional screed occasionally walkable

SK52 -Renovation of masonry with break-fill system

SK71 -Repointing work of cotto tiled and exposed stones with binder mixed with sand

(**SK47**) Cleaning of the surfaces to be treated, removing dust, detached parts, old plasters, old varnishing and any substance that can affect the adhesion of the new product. Wet the cleaned surface until SSD conditions are achieved. Apply the required coat of mortar for plasters mixing on site adequate clean aggregates with 300/kg/m³ of binder mix Limepor LGS produced by Kimia S.p.A. or similar product

(**SK8**) In case of non-connected screed cover the surface to be treated with an impermeable sheet (PVC or bituminous products) to avoid problems with rising damp. In case of connected screed apply on the existing surface Betonfix MC as adhesion bridge. Proceed with pouring the new screed, with steel reinforcement mesh, obtained mixing Limepor LGS by Kimia S.p.A. or similar product with adequate aggregates..

(**SK52**) Start with shoring both the surfaces of the wall to be renovate. Remove the damaged portions of the wall, including stone or brick elements and mortar. Reconstruction of removed parts using stone or brick elements and mortar to be mixed on site. All the new elements will be put under load by using wood wedges. The mortar will result from mixing adequate clean aggregates with binder mix Limepor LGS by Kimia S.p.A. or similar product. Once the curing time of the mortar ended it is possible to remove the above-mentioned wedges and fill the correlated space with stone or bricks elements properly shaped.

(**SK71**) Removal of detached mortar parts from joint, cleaning from dust and any substances that can affect the adhesion on the existing support. Apply by hand the required thickness of mortar obtained on site mixing the binder mix Limepor LGS by Kimia S.p.A. or similar product with clean and adequate aggregates.

The fibre reinforced product made out of NHL (CE marked according EN 459) with a low water-soluble salt content and very compatible with old materials used in existing masonry structures, will be prepared strictly following information included in TDS issued by the Producer: In particular:

- Particle-size distribution EN 1015-1 granulometry 0,09mm: 100 %;
- Particle-size distribution EN 1015-1 granulometry 0,06mm: 91 %;
- Curing time EN 196-3 start setting: 120 ± 30 mins
- Curing time EN 196-3 end setting: 230 ± 30 mins;
- Bleeding UNI480-4: None;
- Compressive strength in 7 dd EN 196-1: > 1,9 MPa;
- Compressive strength in 28 dd EN 196-1: > 3,1 MPa;
- Flexural strength in 7 dd EN 196-1: > 0,6 MPa;
- Flexural strength in 28 dd EN 196-1 : > 0,8 MPa.

The product will be CE marked according EN 459 009/CPD/A46/0003.