



# CALCEPURA<sup>®</sup>

La tradizione della calce.

## INIEZIONI

NHL 5.0 natural hydraulic lime line

CALCEPURA INIEZIONI is a natural, structural, breathable mortar, classified M10, based on CALCEPURA LEGANTE NHL 5.0, selected aggregates with controlled grain size and specific additives that improve its workability.

THE PRODUCT IS PREPARED WITH CERTIFIED NHL NATURAL HYDRAULIC LIME AND COMPLIANT WITH THE EN 459-1 STANDARD. COMPLIANT WITH THE UNI EN 998-1 STANDARD.

### CHARACTERISTICS

Thanks to the quality and value of CALCEPURA LEGANTE, the product is ideal for the construction of historic walls or in the green building sector. CALCEPURA INIEZIONI has a high permeability to water vapor and a limited reactivity to the salts contained in the walls, contributing to better living comfort.

### ADVANTAGES

- Compatible with materials and techniques of ancient tradition
- Eliminates and prevents fungi and mold
- Highly permeable to water vapor
- High mechanical performance

### WARNINGS

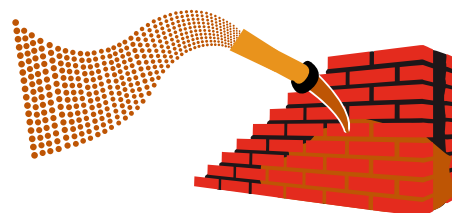
Protect the product from rain, washing away, frost, rapid drying or strong ventilation for at least 48 hours after application.

### TECHNICAL DATA

UNI-EN 998/2 class	M10
Color	light hazelnut
Granulometry	0 - 0, 4 mm
Powder density	1350 kg/m <sup>3</sup>
Dough volumetric mass	1900 kg/m <sup>3</sup>
Hardened volumetric mass	1700 kg/m <sup>3</sup>
Ph dough	12
Segregation	Absent
Exudation test	0.1% - EN 445
Compressive strength at 28 days (UNI EN 1015-11)	> 10 N/mm <sup>2</sup>
Flexural strength (UNI EN 1015-11)	≥ 3 N/mm <sup>2</sup>
Reaction to fire	EUROCLASS A1
Thermal conductivity (vt P=50%)	λ 0.83 W/mK
Initial shear strength	0.13 N/mm <sup>2</sup>
Vapor permeability coefficient	μ 15/35
Conservation	In the original packaging and protected from atmospheric agents, the product retains its original characteristics for approximately 12 weeks.

### INSTALLATION FEATURES

Mixing water	36-40%
Application temperature	+ 5°C ÷ +35°C
Pot life / application time	about 40 min at a temperature of 20°/25°C
Pot life of the dough	about 1 hour at a temperature of 20°/25°C
Mixing time in the plastering machine	30 sec / 1 min
Plastering machine downtime	< 20 min
Water absorption	< 0.4 kg/(m <sup>2</sup> .min0.5)
Mixing times laboratory tests	(UNI EN 1015-2:2007)
Supply	20 kg bag / 64 bags per pallet



## PREPARATION OF SUPPORTS

The areas to be consolidated with CALCEPURA INIEZIONI must be filled or plastered over the entire surface with mortars from the CALCEPURA range, simultaneously inserting small tubes or injectors at an appropriate distance (recommended mesh 50x50 cm) to perform the subsequent filling with CALCEPURA INIEZIONI. This ensures the containment of the hyperfluid mortar without altering the breathability of the masonry. Always inject from the bottom upwards to encourage the escape of air and ensure continuity of the structural compaction. Before injecting the filling and consolidating mortar into cracks, subsidence, cavities and detachments, it is necessary to saturate the entire internal structure with water using the same access routes provided for the mortar itself. Proceed with the injection of CALCEPURA INIEZIONI only after making sure that the structure has absorbed all the injected water.

## PRODUCT PREPARATION

Prepare CALCEPURA INIEZIONI by mixing 1 20 kg bag with the dose of clean water indicated on the package. Pour the water into the container and then gradually add the powder. Mixing can be done in a cement mixer, bucket (by hand or with a low-speed mechanical stirrer), or with a continuous mixer. Mix until a homogeneous consistency is obtained without lumps. Alternatively, use a plastering machine to mix and pump the product at the same time using a stator-rotor with a suitable capacity. Use all the prepared product without recovering it in the next mixing. Use running water that is not subject to the influence of external temperatures. The quality of the mortar, guaranteed by its strictly natural origin, will be compromised by the addition of any dose of another element.

## INSTALLATION

CALCEPURA INIEZIONI is applied by injection with mechanical pumps, pressure tanks or by gravity pouring. It is preferable to inject the material from the bottom upwards to ensure the expulsion of all the air contained in the internal section involved in the operation, avoiding the formation of empty pockets. When the mortar comes out of the upper injector, stop the injection, close the injector in service and continue with the operation on the upper one. Proceed in the same way until reaching the top of the lesion. On horizontal surfaces, however, proceed by pouring or create an inlet injector on the detachment area and some exit holes in points diametrically opposite to the injection point. Here too, filling will occur when the mortar overflows from the exit holes. CALCEPURA INIEZIONI guarantees long workability and pumping times, and does not segregate inside the pumps even when subjected to working pressure. It can also be pumped over considerable distances and at great heights, allowing the work point to be equipped on the ground floor of the construction site and avoiding manual handling of bags and equipment.

## SAFETY

The data and information contained in this sheet are the result of the knowledge available at the date of publication. Esincalce srl assumes no responsibility for damage to persons or things that may arise from use of the product other than that for which it was intended. The sheet does not replace but integrates texts or standards that regulate the activity of use. The user has full responsibility for the precautions that are necessary for the use that will be made of the preparation. For anything not reported, please refer to the safety sheet of the product online [esincalce.com](http://esincalce.com) or by writing to [info@esincalce.com](mailto:info@esincalce.com)