

Secil NATURAL LIME NHL 3,5

NHL 3,5 - NATURAL HYDRAULIC LIME

TC.E.085.0

1. DESCRIPTION

Secil NATURAL LIME NHL 3,5 is a hydraulic binder composed in its majority by calcium silicates and aluminates, and calcium hydroxide. It is obtained by the burning of marlstone, followed by grinding.

Secil NATURAL LIME NHL 3,5 is classified as NHL 3,5 according to the NP EN 459-1:2010.

Secil NATURAL LIME NHL 3,5 is a unique binder. In addition to featuring hydraulic properties, it also suffers a setting process by carbonation.

2. FIELD OF APPLICATION

In the production of mortars, as the only binder or mixed with other hydraulic or non-hydraulic binders, giving them workability and flexibility, significantly reducing retraction in hydraulic mortars (for ex. masonry, rendering and finishing mortars).

In the production of rehabilitation mortars, as only binder, for the execution of internal and external renders, over ancient substrates.

3. PRODUCT CHARACTERISTICS

Physical Characteristics	Value	Standard
Color	Beige	-
Specific Mass (kg/dm ³)	0,65 ± 0,05	EN 459-1
Density (g/cm ³)	2,7	-
Fineness (%)	90 µm ≤ 15,0 200 µm ≤ 2,0	EN 459-1
Blaine (cm ² /g)	9000	-
Expandability - alternative method (mm)	≤ 20	EN 459-1
Free Water (%)	≤ 2,0	EN 459-1
Air content (%)	≤ 5	EN 459-1
Penetration (mm)	<10 e >50	EN 459-1
Setting time (h)	initial > 1,0 final ≤ 30,0	EN 459-1

Mechanical Characteristics	Value	Standard
Mechanical compressive strength 28 dias (MPa)	≥ 3,5 e ≤ 10	EN 459-1

Chemical Characteristics	Value	Standard
Sulphates (SO) (%)	≤ 2,0	EN 459-1
Free Lime Ca(OH) (%)	≥ 25,0	EN 459-1

4. PRODUCTION OF MORTARS

The dosage of **Secil NATURAL LIME NHL 3.5** in a mortar must be adequate for the intended final use. In rendering and bedding mortars **Secil NATURAL LIME NHL 3.5**, has an important role as only binder or mixed with others.

Previously mix the **Secil NATURAL LIME NHL 3,5** with the aggregate and afterwards add water in the necessary amount in order to obtain a good workability. As an indicative value, please use a water/binder ratio of 0,6 expressed by volume.

Secil Argamassas

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Stone Quarry



Lime Kilns



Burnt limestone

Complementary Advice

- ▶ Excess of water in the mixture is prejudicial to the physical properties of the render;
- ▶ Always use the minimum amount of water necessary to ensure a good workability;
- ▶ The mixing water must be free of any impurities (clay, organic material), whenever possible, tap water must be used;
- ▶ Once the mortar ratio is determined, keep the dosage and mixing times constant.

Restrictions

Do not apply mortars to temperatures below 5°C and over 30°C, avoiding application in strong winds or high solar exposure.

Do not use softened mortars or that have initiated their setting time.

Avoid rapid drying of the mortars, spraying the substrate 1 or 2 hours before application, and spraying again as soon as the mortars show sufficient resistance. Repeat this procedure 1, 2 and 7 days after.

5. HYGIENE AND SAFETY

(DOES NOT DISMISS CONSULTATION OF THE PRODUCT SAFETY FILE)

- ▶ May cause skin irritation;
- ▶ May cause severe eye damage;
- ▶ May cause respiratory irritation;
- ▶ Keep away from children ;
- ▶ Use protective gloves/ garments /eye protection / facial protection;
- ▶ **If in contact with eyes:** wash carefully with water for several minutes. Seek immediate medical advice;
- ▶ **If in contact with skin:** wash thoroughly with water and soap;
- ▶ Do not breathe dust / vapours;
- ▶ Remove patient to fresh air and keep at rest in a position comfortable for breathing;
- ▶ Dispose of content / packaging according to legislation in force.

6. PACKAGING AND VALIDITY

Packaging

- ▶ 25 kg bags on plastified pallets
- ▶ In bulk, for use in silo systems

Validity

Secil Natural Hydraulic Lime must be transported, handled and stored in its original packaging (should only be opened for immediate use), away from humidity and exposure to heat.

In these conditions sre respected, it can be stored for a **12 month** limit

Once the application conditions of our products are beyond our reach, we will not be held responsible for its incorrect usage. It is the client's duty to verify the suitability of the product for the predicted use. In any case, our responsibility is limited to the value of goods supplied. The information shown on this file may be changed without previous notice. In case of doubt, and if you should need any additional information, please contact our technical services.

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DESIGNATION: Secil NATURAL LIME NHL 3,5

REFERENCE STANDARD: EN 459-1:2010

PREDICTED USE: Preparation of binder for mortars, production of other construction products and civil engineering uses.

Produced by Secil Martingança, S.A., whose Quality Management System is certified by APCER with the nº 2003/CEP.2132

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