

MADE IN ITALY

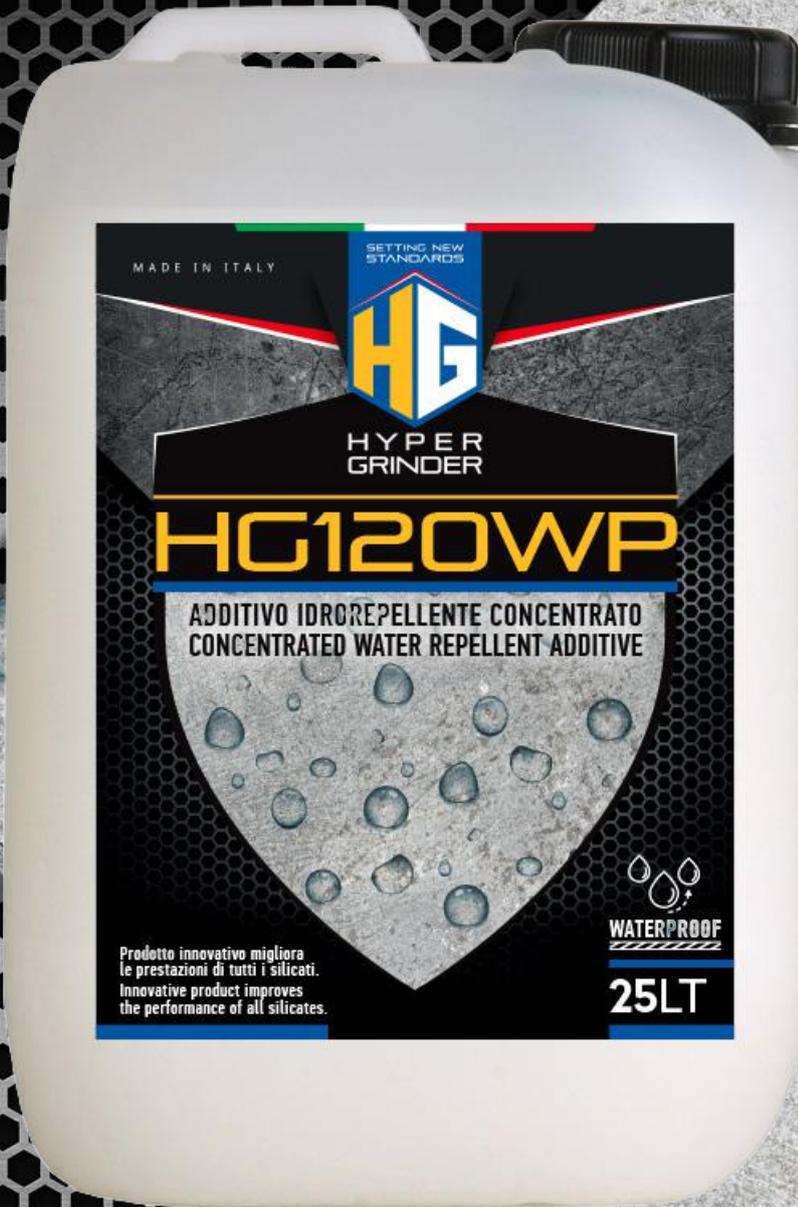
Added to 10% in silicates/ consolidators

Lithium or Sodium/ Potassium base, besides the benefits that they perform, it makes the treated surfaces, water repellent with pearly effect. Particularly suitable for the "Concrete Hardener".

SETTING NEW STANDARDS



HYPER GRINDER



WATERPROOFING
ADDITIVE CONCENTRATE
FOR SILICATES

HG120WP



INNOVATIVE PRODUCT THAT
IMPROVES THE PERFORMANCE
OF ALL SILICATES

HG120 WP

HOW TO USE

HG120WP is an HYDROPHOBIC agent in water, concentrated, colorless emulsion, capable of developing a high water repellent performance of concrete surfaces and absorbent mineral building materials..

Added to 10% in silicates/consolidators

Lithium or Sodium/Potassium base, besides the benefits that they perform, it makes the treated surfaces, water repellent with pearly effect. Particularly suitable for the "Concrete Hardener" line:

- » **Concrete Hardener H10 – H35**
- » **Concrete Hardener Lithium**
- » **Concrete Hardener Lithium Pro**

Added to 10%

to implement performances in common water base alkaline sealants for concrete substrate dust treatments. Used on interior, external, new or existing concrete or concrete surfaces that require waterproofing without altering their breathability or affecting the appearance.

As a direct water repellent:

if diluted at 5-10% in water only, it is an excellent hydrophobic and protective water repellent for all types of concrete absorbent materials, tombs and bricks exposed to the action of water:

- » Cement plasters.
- » Prefabricated panels or exposed concrete blocks.
- » Limestone and natural stones in general.
- » Exposed Bricks.
- » Suitable on dispersion coatings and varnishes.

ADVANTAGES:



Compatible with all water base systems.

Provides hydro repellence to organic and inorganic alkaline water products.

It does not create film and does not compromise the breathability of the surface.



- Reduces the absorption of liquid water (better waterproofness) without altering the passage of water vapor.

Increased resistance to chemical attacks, salts and pollutants dissolved in water and stains by decreasing the dirt pick up.

Decreases the risk of alkaliaggregate reactions (ASRs).

Prevents the formation of efflorescences, from rising damp.

Improves resistance to vegetable oil and mineral oil stains.



HG120 WP

APPLICATION

HG120 AS AN ADDITIVE TO CONCRETE HARDENER H10:

Shake HG120 before use and add it while mixing to the extent of 10% to the ready-to-use silicate "Concrete Hardener H10".

HG120 AS AN ADDITIVE TO CONCRETE HARDENER H35:

Dilute Beton Hardener H35 with water in their corresponding mixing ratio of 1:2. Shake HG120 before use and add it while mixing to the extent of 10% to the diluted "Beton Hardener H35" silicate.

KH120 AS AN ADDITIVE TO CONCRETE HARDENER LITHIUM:

Shake before use and add it to the Concrete Hardener Lithium while mixing, to the extent of 10%.

PROPERTY OF THE CONCRETE HARDENER H10-H35-LITHIUM MODIFIED:

Adding HG120 to the Concrete HARDENER you obtain a permanent WATER BASED protective, CONSOLIDATING, HARDENING, WATER REPELLENT, transparent and odorless, for concrete and cement-based surfaces in general. This particular molecule, penetrating into the substrate, it reacts chemically to form sealed breathable capillaries, making harder, more wear resistant, less absorbent to liquid water repellent, ultimately brings support to its maximum useful life.

The concrete improves significantly, in appearance and in technical characteristics, with surface treatment Concrete HARDENER MODIFIED. It penetrates through the pores of the concrete, reacting chemically with the Ca(OH)_2 , forming a silicate calcium gel. The saturated pores, in addition to improving the aesthetics, drastically reduces the water permeability (with the exception of steam), increasing the surface hardness, the durability of the concrete and in particular the resistance to acid corrosion. By allowing moisture to escape, the risk of frost and other damage is avoided.

The Concrete HARDENER penetrates the concrete pores: from the first application it completely fills all pores including the capillaries, reacting with the ions Ca^{++} that are

IMPREGNATION OF CONCRETE FLOORS, SURFACES INTERNAL, EXTERNAL CONCRETE OR CEMENT

in the hardened concrete, forming a silicate calcium gel resistant to water and other liquids, according to the reaction: $\text{Ca-SiO}_2 \rightarrow \text{CaO-SiO}_2$. This reaction occurs inside the concrete pores. The ca-silicate gel clogs the porosities, making the cement waterproof to liquids and at the same time harder, more resistant to wear, insensitive to carbonation and more resistant to the aggressive action of chlorine. The use of the Concrete HARDENER Lithium version, in contact with metals, forms monomolecular films

of metallic silicates, impervious to oxygen and acids and therefore acts as anticorrosive. In order to provide maximum performance to the concrete surface, we recommend the

use of the modified Lithium version, which is able to penetrate into the capillaries of the concrete thanks to its low viscosity and especially low surface tension that sets it apart from other products that you can find on the market. Thanks to its features, the Concrete HARDENER Lithium -HG120 penetrates deeper and allows you to achieve excellent waterproofing.

AREAS OF APPLICATION:

Built-in treatment for cement floor saturation. Internal, external, new or existing concrete or Cement based surfaces that need to implement abrasion resistance and hardness, resistance to liquids, without altering their breathability, offering a stable aesthetic quality. Particularly suitable for high-density concrete.



HG120 WP

ADVANTAGES:

Floors treated with Concrete Hardener lithium WP obtain: water repellency, increase hardness, higher resistance to scratches, high resistance to chemical agents, anti-allergic surface, increase brilliance.

- 1 - Deep saturation, thanks to a low surface tension.
- 2 - Reduces the absorption of liquid without altering the passage of water vapor.
- 3 - Increased resistance to chemical, stains and dirt.
- 4 - Very useful to protect the surface from tire tracks or rubber wheels like forklifts.
- 5 - Decreases the risk of alkali-aggregate reactions (ASR).
- 6 - Protects against contaminations from mineral and vegetable oils.
- 7 - Protects against penetration and aggression of chloride ions.
- 8 - Internal cohesion reaction with the concrete increases the resistance to compression and abrasion.
- 9 - In case of concrete color treatment with Concrete Color Dye, it protects the applied color by slightly intensifying the color and gloss.
- 10 - After a few hours from the treatment the area is ready to be used, but bear in mind that the reaction is completed within 2 weeks.

Appearance	Milky liquid
Odor	Odorless
Ph	7,5 – 9,0
Density	1.0 ± 0.02 kg/l
Dilution	1 – 10%

TECHINCAL DATA

Package: container 5 lt – 25 lt -lbc 1000lt
 Storage: The product remains stable for 12 months in the supplied containers, well closed and at a temperature between 5 and 30 degrees Celsius.



AFTER ADDING HG120 TO THE CONCRETE HARDENER, PROCEED AS FOLLOWS:

The areas that can receive treatment must be uniform, dustfree, clean and dry, free of pollutants that could compromise some or all of the product's absorption.

During grinding cycles or lower grit polishing stages (with a low roughness profile), use low-pressure sprayers, spray the product and distribute it homogeneously with microfiber cloth, while on coarse profile surfaces such as brushed concrete, use industrial brushes. After applying as a HARDENER, wait 6-12 hours to continue the polishing cycle. It is critical that the product does not dry before it has penetrated into the surface. If the absorption of the hardener is slow, add moderate quantities of water without over-diluting the solution. If the absorption is immediate, adjust the quantity and reapply more of the product in order to keep the surface wet for at least 30 minutes.

Densifying treatment can be performed on just poured concrete after grinding, leveling or smoothing/polishing, always recommending a preliminary test in order to check for the absence of interference. At a distance of 12 – 24 – 48 hours from the first application, if the treated surface is still absorbing, reapply the Concrete Hardener Lithium WP until pore saturation. Remove any unabsorbed liquid and allow the surface to dry.

After 3 days from the 1st application, you can wet the surface with water to check its water resistance. In very old cement, the existing calcium is almost all insoluble and

therefore not able to generate Ca^{++} . In this case, preliminary treatment is required with a solution of 5% calcium nitrate or calcium acetate.

HG120 AS HYDROPHOBIC DIRECTLY DILUTED IN WATER:

The product is supplied in a concentrated form and must be diluted with water just before application, to varying degrees from 5% to 10%.

If you expect long storage time of the diluted product, use distilled water.

Apply with low-pressure manual sprayers (0.5 bars) on cohesive, dust-free, clean and dry surfaces that could compromise partial or total absorption.

Application to vertical surfaces: in order to avoid excessive consumption and toning risks, we recommend laying when the wall is in the shade.

The effectiveness of the water-repellent treatment with diluted HG120, will depend on the porosity of the surface along with the applied amount of the product.

The consumption of the diluted product (HG120 diluted to 10% in water) on cement and brick surface, can range from 0.250 to 0.500 kg/m² (25-50 gr/m² of HG120 Concentrated).

For consumption on stibe surfaces, it is advisable to test for any tonalizations regarding the mineral type).



HG120 W/P

IMPORTANT NOTICES:

For brick and burnt brick applications, light tonalizations of the material may occur, so it is advisable to test in site conditions. The instructions in this form are indicative of an average case study and do not replace the evaluation of the professional user who will have to decide the choice of the right product and its best application in relation to the situation that presents itself. Before application, test for product compatibility for the required use, materials and environment to which it is intended, in relation to your professional, personal, environmental and general conditions in which you must operate. The supplier, not present at the time of application, is not responsible to damages of any kind, direct or indirect to persons, things, environment, activities or work in progress, resulting in the choice and application of the product as these constitute the user free conscious professional choice.



Densifier+10%HG120



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