

# CONCRETE HYDRO

## CONSOLIDATING WATER REPELLENT FOR CONCRETE



5 litres

A water-based water-repellent consolidating sealer. Specially formulated for concrete and effective on all porous materials, including plaster, render, bricks and tuff. Dust-binding and breathable, it does not alter the appearance of materials.

### CHARACTERISTICS AND ADVANTAGES

- Water-repellent and consolidating sealer
- Dust-binding action and breathable
- Blocks efflorescence
- Anti-fouling and anti-pollution action
- Compatible with paints
- Treatment resistant to UV radiation
- A VOC-free product with a low environmental impact



\* A VOC-free product with a low environmental impact and the INDOOR AIR COMFORT GOLD certificate. The product has passed the applicable stringent requirements and conforms to all compulsory national standards (for example: FrenchA+, CAM Edilizia, Belgian Regulation, AgBB, etc.) as well as innovative environmental sustainability criteria, such as LEED, BREEAM, WELL. For further information consult [www.filasolutions.com/eng/company/the-fila-research-centre](http://www.filasolutions.com/eng/company/the-fila-research-centre)

### MATERIALS

CONCRETE, PLASTER, BRICK, TUFF - CIMENT, ENDUIT, BRIQUE

### FIELDS OF APPLICATION

- Protects walls and new or renovated outdoor coverings.
- Prevents dusting without creating a surface film.
- Effective on ceilings or vaults that tend to flake.
- Protects new surfaces against ageing, by combating blackening due to weathering and the growth of moulds, algae and lichen.
- In heritage buildings, for consolidating non-cohesive surfaces and hinder flaking.
- On exposed bricks, shingles, hollow flat blocks for preventing efflorescences such as chlorides, carbonates, sulphates and saltpetre.
- Lasting protection of tuff, brittle and porous stone surfaces and manufactured stone surfaces.
- On cement walls, plaster and render before and after painting (for example, with washable paints for interiors, siloxane, acrylic-siloxane, lime-based paints and renders for exteriors).
- For jobs complying with CAM criteria, Air Comfort Gold certificate\*, free of solvents and VOCs 0 g/l.

### INSTRUCTIONS

**How to use it:** ready to use. On a clean, dry surface evenly apply **CONCRETE HYDRO** with a paintbrush or an airless sprayer.

**FOR PROFESSIONAL USE ONLY:** use the appropriate PPE as indicated on the safety data sheet if the product is applied with an airless sprayer.

### WARNINGS

Carry out a patch test on a small surface area to check for any changes in colour. Avoid accumulations of unabsorbed product. Do not apply the product externally if rain is forecast. Avoid applying on surfaces with condensate build-up and under direct sunlight. Avoid contact with new polished marble and natural stone, glass, wood and metal surfaces. If contact occurs, rinse the surface immediately. Does not protect against acidic aggression. Storage temperature: from 5° to 30° C. This product must be applied to surfaces with temperature between 10°C and 30°C.

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### TOOLS FOR APPLICATION



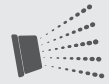
BRUSH



FLAT BRUSH



WAX APPLICATOR



AIRLESS

For professional use only

The tools can be cleaned with water.



### TECHNICAL SPECIFICATION

Anti-ageing protective agent. A transparent liquid consisting of organic compounds of silica and potassium silicate dispersed in water (density: 1.04 kg/l; pH: 12.06). For concrete, plaster, render, bricks and tuff. For floor and wall applications, both indoors and outdoors. Water-repellent and consolidating action, dust-resistant action. Prevents deterioration due to atmospheric agents, blocks efflorescence (chlorides, carbonates, sulphates and saltpetre). Hardens the surface. Breathable, UV-resistant and non-yellowing. A VOC-free product with a low environmental impact and INDOOR AIR COMFORT GOLD certificate. Manufactured by an ISO 9001- and ISO 14001-certified company.



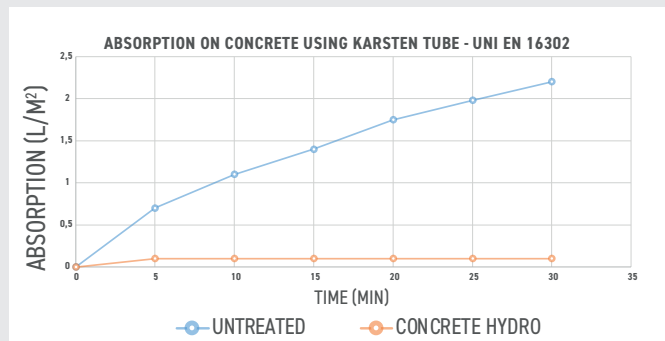
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### TECHNICAL TESTS



**Water-repellent action** verified according to *UNI EN 16302:2013 - Measurement of water absorption by pipe method* (Karsten tube). CONCRETE HYDRO reduces absorption by up to 95%.



The Karsten pipe test is used to determine the water absorption of vertical surfaces, for example outdoor walls exposed to rain. The initial water column exerts a pressure on the surface comparable to that exerted by drops of heavy rain.

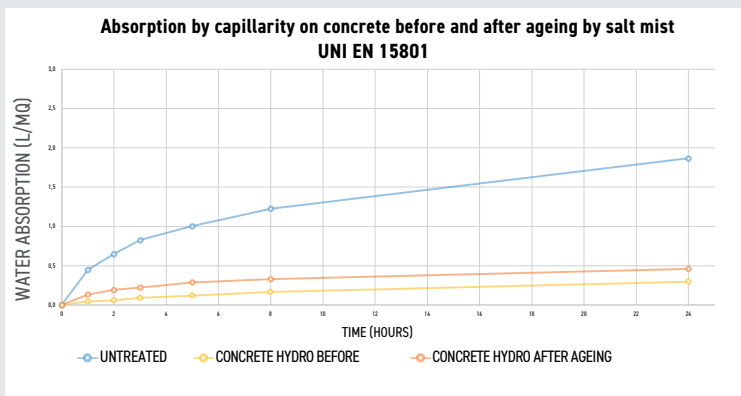
**Water-repellent action** by measuring the contact angle according to *UNI EN 15802 - Determination of static contact angle*. Conventionally, a surface is hydrophobic when  $\theta > 90^\circ$ . CONCRETE HYDRO on an unpolished surface reaches angles greater than  $120^\circ$ .

**Consolidating action** verified through *UNI EN 14147:2003 - Determination of resistance to ageing by salt mist*. The treatment with CONCRETE HYDRO counters erosion caused by the sodium chloride solution (100 g/l) atomised at  $35^\circ\text{C}$  for 50 cycles.

**Breathability** verified according to *ASTM E96M - Water vapour permeability of materials*. The treatment with CONCRETE HYDRO maintains breathability above 90% compared to the untreated material.

**Withstands UV radiation, does not yellow.** Ageing accelerated through exposure to UV radiation as per *ASTM G154*. Colour variation assessed according to *UNI EN 15886:2010 - Colour measurement of surfaces*.

Does not alter the surface's original coefficient of friction.



### HOW IT WORKS

**CONCRETE HYDRO** has a water-based formula containing silica and silicates. Besides making it water-repellent, the treatment consolidates the material thanks to its mineralising action and prevents dusting. Its formula does not create a film and thus allows water vapour to pass.

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### TECHNICAL FEATURES

<b>COMPOSITION</b>	Formulated with dispersions of organic compounds of silica and potassium silicates dispersed in a watery solution
<b>APPEARANCE</b>	Transparent colourless liquid
<b>ODOUR</b>	Odourless
<b>DENSITY</b>	1.04 kg/l
<b>STORAGE TEMPERATURE</b>	From 5°C to 30°C
<b>APPLICATION TEMPERATURE</b>	From 10°C to 30°C
<b>DRYING TIME*</b>	4 hours
<b>CURING TIME*</b>	24 hours
<b>VOC (Volatile Organic Compounds) (Directive 1999/13/EC)</b>	0 g/l

### COVERAGE (5 litres)

UP TO

40 m<sup>2</sup>

Coverage is indicative and refers to one coat

\*Indicative time that varies depending on the environmental conditions and on the material

### Packaging

5 litres: boxes of 4

### Available on request:

100-litre drums

1,000-litre cubes



### SAFETY TIPS

Keep out of reach of children. Do not disperse into the environment after use. The product is classified as dangerous under Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

For safety-related information, please refer to the safety information sheet available on the website [www.filasolutions.com](http://www.filasolutions.com) and carefully read the product's label.



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*The recommended instructions and application procedures for our products are the result of accurate tests carried out in our laboratory. There are, however, certain factors that we cannot predict: the condition of the surface before the treatment, particularly rare or unspecified properties/finishes of the material, environmental conditions, and the professionalism of the user. This is why we recommend carrying out a preliminary test on the surface to be treated. FILA always guarantees the quality of its products, but it cannot assume any responsibility in the event of incorrect use.*