

Hydro W 290

Hydrophobisation LH



Technical information

Product features

- Effective waterproofing impregnation
- Highly water repellent
- Very high penetration ability
- Open to water vapour diffusion
- UV and weather resistant
- High resistance to alkali
- Reduces water and pollutant absorption
- Improves the resistance of frost and de-icing salt
- Limits salt crystal formation
- Low odour
- Easy application
- Contains solvents

Scope of application

- Hydro W 290 water repellent is suitable for the water repellency of building materials, mineral plasters, concrete, bricks, natural stone, fibre cement, mineral mortar, mineral paints.
- Hydro W 290 water repellent prevents the formation of salt crystals and frost damage. The product protects facades against the acidic effects of rainwater and the pollutants dissolved in it.

Technical limits

Not suitable for already damaged and unrepaired mineral building material surfaces. Construction defects such as loosely cracked concrete surfaces and components, defective cracked joints in the brickwork and faulty connections, as well as exposure to salts, must be eliminated before the impregnation is applied. Rising and hygroscopic moisture in the building material must also be eliminated using suitable measures. No water and any pollutants dissolved in it may come beyond or below the hydrophobised area. **Hydrophobic impregnations cannot prevent severe structural damage caused by high concentrations of harmful salts.**

Technical information

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| Density at 20°C: | 0.80 g/cm ³ |
| Colour: | colourless |
| Odour: | like solvent |
| Flash point: | 40°C |
| Active ingredient content: | ca. 7% |
| Storage/shelf life: | Cool and dry in the closed original container for at least 24 months |
| Water hazard: | WGK 1 (water hazard class) |
| Consumption: | depending on the application, to be determined by test areas |
| Packages: | 1l, 10l, 30l |
| Item number: | 190 |

Surface

The surface must be **dry**, clean, free of loose parts, dust, oil and the like and in good condition. If prior cleaning is necessary, the cleaning method can be freely selected depending on the type of soiling and the condition of the surface. With chemical cleaning methods, the surface must be washed thoroughly. No residues (e.g. tensides) must remain, as these could otherwise impair the hydrophobicity.

Affected, weathered materials must be pretreated with stone strengthener, for example. Cracks, holes and the like, damage to the subsurface must be repaired.

Fresh concrete should be impregnated four weeks after production at the earliest. If mineral paint is applied, the waiting time is at least 8 days. If the impregnation is applied earlier, it must be checked in each individual case; depending on the construction material composition and residual moisture, this requires the necessary test of suitability and desired functionality in the individual case at the factory or on site by the concrete manufacturer/processor. The moisture content should not exceed 4 weight% (surface up to 20mm depth). The absorption of the impregnation depends on the absorbency of the substrate, which is largely determined by the pore volume and moisture content of the building material. The surface must therefore be as dry as possible.

Application

Hydro W290 Hydrophobisation is a non-film-forming hydrophobing impregnation based on alkyloxysilane/siloxane, with aliphatic hydrocarbons as solvents. Hydro W290 Hydrophobisation develops its hydrophobing effect as a result of the reaction with air humidity or with water absorbed on the pore and capillary walls of the building material. Siloxanes are organic components of silicone in oligomeric form.

Hydro W290 Hydrophobisation is a colourless liquid with a high ability to penetrate the building material. The product makes mineral building materials water-repellent, but at the same time maintains vapour permeability. The result is a good and permanent pearling effect.

Adjacent components and materials that should not come into contact with the hydrophobisation (e.g. glass, painted surfaces, plants) must be covered.

Test areas must always be created to check any optical changes that may occur and to determine the consumption.

Hydro W 290 Hydrophobisation is applied to the building material by flooding or brushing (airless, low-pressure pump or brush). In general, it is sufficient to treat the building material twice, full, wet on wet, evenly. The flooding method is best suited for this. Hydro W 290 Hydrophobisation should be applied from top to bottom. Application temperatures below 10°C and direct sunlight should be avoided; the ideal temperature range for the application is between 10–25°C.

If rain suddenly sets in, the areas that have already been impregnated must be covered and further impregnation must be stopped. Freshly impregnated surfaces must be protected from driving rain for several hours.

In order for the impregnation agent to penetrate well, the building material must be dry.

The need for impregnation for the double application depends on the absorbency of the building material in question:

Natural stone: 0.5–1.5 l/m²
Brickwork: 0.5–1.0 l/m²
Mineral plaster: 0.5–0.8 l/m²
Aerated concrete: 0.5–1.0 l/m².

The values given are guidelines. The need for impregnation must be determined for the calculation and tendering on a sufficiently large (1–2 m²) test area. This can also be used to check the effectiveness of the hydrophobization.

Disposal

Release into the environment is to be avoided and it should be prevented from entering the sewage system. Product residues are to be properly disposed of in accordance with official regulations.

Danger note

The current safety data sheet is decisive, which is available for download at www.scheidel.com. General: Always wear protective clothing, protective gloves, eye protection and face protection. Liquid and vapour are flammable. Keep away from heat, hot surfaces, sparks, open flames and other types of ignition sources. Don't smoke. Avoid breathing the vapours. Use only outdoors or in a well-ventilated area

All information contained in this technical information is based on practical experience. Universal applicability is excluded because of the different practice requirements. Self-tests are to be carried out. With the publication of this technical information earlier editions lose their validity.

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