ECO HYDRO SIL

Innovative silicate densifier

A1	Class I	< 7.5%	min. 2
REACTION TO FIRE	PENETRATION DEPTH, <10MM	WATER ABSORPTION COEFFICIENT	APPLICATIONS, WET-ON-WET

PROPERTIES AND BENEFITS

- Silicate technology
- Solidifies the substrate and increases chemical resistance
- Protection against penetrating water in case of cracking
- Water vapour permeable
- Made with alternative materials with a low CO2 footprint
- Environmentally friendly
- Very low emission EMICODE EC1 PLUS
- Odourless
- Reduces surface abrasion
- Protection against efflorescence

DESCRIPTION

Eco Hydro Sil is an innovative silicate densifier and subsoil consolidation, sprayed on substrates or brushed/rolled onto surfaces to cover all areas. It protects against penetrating moisture and chemical stress.

COLOUR

Transparent.

RANGE OF USAGE

For indoor and outdoor use: solidifies porous cementitious substrates, permanent protection against ground water, salt water and strong chemical stress, as a sealant against penetrating moisture on walls, protection against carbonation, and for protection and restoration of drinking-water reservoirs, sewage plants and wastewater pipes. Suitable for concrete, facades, walls, cellars, horizontal barriers, pipes and all cementitious substrates; also for factory-set protection of concrete products and parts, subsequent paintings, and impregnation of Silicate Systems products.

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Technical information

COMPOSITION

Basis	Inorganic
pH value	11.4
Viscosity	< 100 mPa
Organic solvents	None
Density	1.1 g/cm³

CONSUMPTION

Concrete / screed	400–800 g/m²
Self-levelling / flowing screed	50–80 g/m²
Self-levelling, acid-resistant	150–200 g/m²

APPLICATION CONDITIONS

Processing temperature	min. 5 °C, max. 55 °C
Max. admitted air humidity	max. 80% r.H.
Necessary applications	minimum 2

PACKAGING AND STORAGE

Packaging	5 or 30 L canisters
Storage	12 months

Store in original packaging, in a dry and controlled temperate environment (not below 0ºC). Reseal opened containers immediately. The information above is given based on our experience. Adjustment may be required in case of object-specific fluctuations.

PREPARATION OF SUBSTRATE

The substrate must be absorbent, free of dust, loose parts, oils, fats and other impurities. Chalk and sandy components must be removed before solidification using an efficient industrial vacuum cleaner, and existing coatings or render stripped off. Concrete and other cementitious substrates must be at least 14 days old.

CONCRETE AND SCREED

Spray undiluted onto substrates, or brush/roll to cover all areas, applying at least twice wet-on-wet. Every application must penetrate completely into the substrate; repeat until saturated, cleaning up any surpluses. Protect the surface against rain and moisture for 24 hours after application. Cover the freshly applied surface air-permeably; an air-tight cover is possible after 7 days. On new concrete or cementitious materials, observe the minimum age requirement, and do not exceed the recommended consumption volume.

> **Note**
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> When combined with Eco Hydro Glass, apply Eco Hydro Sil first; once dry (the surface should not be wet), apply Eco Hydro Glass. Both coatings should be applied within one day for optimal results. Depending on the substrate, an excess of either product could impair the surface's appearance.

SELF-LEVELLING COMPOUNDS

On fine-grained, dense substrates such as EcoSilicate self-levelling floor products, pre-wet the surface with clear water using a microfibre mop, then apply Eco Hydro Sil wet-in-wet with a low-pressure sprayer, immediately distributing it uniformly in one direction with a microfibre mop so the whole surface is wetted. Apply in two thin layers, wet-in-wet, for sufficient protection. Keep the mop from running dry for a uniform, stripe-free application, avoiding puddles or large supernatants. Once the last application is completely dry (approx. 2 hours), the surface can be polished if required.

TOOLS AND CLEANING

Brush, wide brush, paint roller or spraying device. All equipment should be washed clean and dried before and after application.

NOTE

In case of decorative surfaces, create a small sample on an uncritical position at least one day before application. Do not apply on non-absorbent surfaces. Protect glass, tiles, clinker and similar from splashing material; aluminium may not encounter the material. Impurities must be washed off immediately with water, and tools cleaned at every interruption of work. Ensure no material reaches the surface prior to application via dripping tools or footwear — otherwise efflorescence can occur on pre-wetted areas. Wear clean footwear during application.

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Notes, safety and declaration of performance

SAFETY, ECOLOGY AND ELIMINATION

Eco Hydro Sil is an alkaline liquid. Refer to the Material Safety Data Sheet (MSDS), available on request, for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

AVAILABLE ON REQUEST

Material Safety Data Sheet (MSDS).

DECLARATION OF PERFORMANCE

CE

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CE — manufacturer details and Declaration of Performance on request from NBS Distribution

NO. ECO HYDRO SIL · EN 1504-2:2004

EN 1504-2: ZA.1b

Surface protection product — impregnation. Innovative silicate sealant and subsoil consolidation

Penetration depth	Class I, < 10 mm
Water absorption & alkaline resistance	< 7.5% vs. untreated; < 10% in alkaline solution
Chemical resistance	No visible defects
Reaction to fire	A1
Drying speed	Class II, > 10 mm
Dangerous substances	None

Also covered by Environmental Product Declaration MD-26095-EN, verified by EPD Danmark (ISO 14025, EN 15804+A2), issued 10-09-2026, valid to 10-09-2031.

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper evaluation by NBS Distribution. Any further details regarding the application of our products have to be confirmed in writing by NBS Distribution. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on nbsdistribution.eu.