

BioIDROCOAT

WATER BASED COLOURLESS WATER-REPELLENT PROTECTIVE AGENT
WITH HIGH PENETRATION FOR ABSORBENT BUILDING MATERIALS

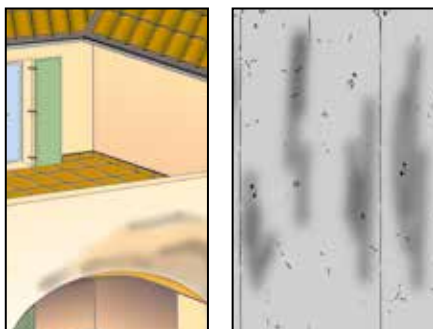
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CHARACTERISTICS		ENVIRONMENTAL	METHOD OF USE			PRECAUTIONS
ALLOWS TO BREATHE	WATER BASED	ECO GREEN	SPRAY APPLICATION	APPLY BY BRUSH	APPLY BY ROLLER	STORAGE: KEEP AWAY FROM FROST

PROBLEM

PROTECT FACADES, ABSORBENT AND POROUS BUILDING MATERIAL



Rain is the main degrading factor for building materials used in external walls and acts through physical/mechanical and chemical processes. Frost/thaw cycles, caused by the phenomenon of the transformation of water into ice and vice-versa, lead to chalking and detachment on absorbent materials. The production of sulphur trioxide and sulphur dioxide in heating systems and motor vehicles causes acidic attack when it rains, leading to the formation of chalky layers that wash away easily.

SOLUTION

BioIDROCOAT is an impregnating agent that does not create a film, therefore it does not stop surfaces breathing. It is made up of a mixture of silane-siloxane oligomers in mineral water with high capacity to penetrate into the capillaries of the mineral support.

BioIDROCOAT reacts with the silicates in the mineral support and with the humidity in the alkaline layer, forming a water-repellent protection.

BioIDROCOAT is perfectly transparent, colourless and does not create surface shine.

APPLICATION FIELDS

BioIDROCOAT is suitable for the protective treatment of all absorbent mineral building materials such as: visible concrete, plaster, cement mortar, sandstone and limestone walls, brick walls, cellular concrete, natural mineral-based stones.



It is ideal for use in the protection of concrete in road construction, bridges, viaducts, guard rails, structures that are subject to disintegrating frost-thaw cycles and the aggressive action of salts.

Impregnation with **BioIDROCOAT**, in general, is carried out to protect vertical or sloping surfaces from atmospheric precipitations.

ADVANTAGES

- It prevents transport of hygroscopic salts.
- Protection against the corrosion of acid rain.
- Protection from bacteria and algae.
- Protection from frost-thaw phenomena.
- High penetration power.
- Excellent resistance to alkali.
- It does not form surface films; high permeability to water vapour.
- Excellent resistance to UV rays.

METHOD OF USE

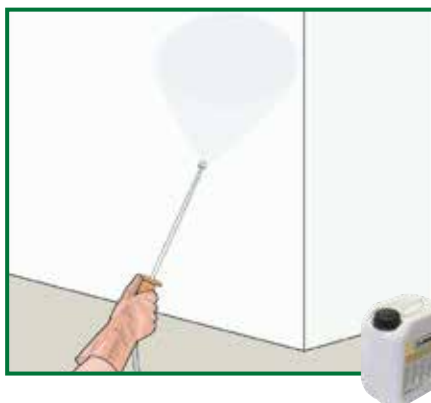
• SURFACE PREPARATION

The dirty surfaces to be treated, covered in micro-organisms and surfacing salts, must first be cleaned with a water cleaner. Cleaning with hot water or water vapour is the best method. Before application, wait until the surface is visibly dry; the damp substrate promotes the reaction of the silane, hence there is no need to wait for long before applying the impregnating agent.

• APPLICATION

BioIDROCOAT is ready to use and is applied to building materials by spraying, by brush or by immersion. Application is normally carried out with a low pressure sprayer (about 0.2-0.4 Bar) in one or more steps, wet on wet, taking care to ensure that the material is saturated and treated evenly. In general **BioIDROCOAT** must be sprayed until it is no longer absorbed and drips 50 cm. For small

surfaces it can also be applied by roller or paint-brush as long as the amount applied is enough to saturate the support. **Wooden, glass and plastic**



surfaces must be protected during application.

• FINISHING

For finishing, **BioIDROCOAT** can be painted over with normal synthetic-binder based paints.

• COVERAGE

Consumption of **BioIDROCOAT** applied on:

- Mineral plaster: 0.5-0.8 l/m²;
- Wall: 0.4-1.0 l/m²;
- Natural stone: 0.1-1.5 l/m²;
- Porous concrete: 0.5-1.5 l/m².

(See following)

TECHNICAL CHARACTERISTICS

	Standard	BiolDROCOAT
Appearance		Liquid
Colour		transparent
Chemical nature		silanes-siloxanes in water
Density	EN 2811-1	1.00 ± 0.05 kg/L
Storage in original packaging in a dry place, away from frost		12 months
Characteristics of product and workability		
Application temperature		+5°C ÷ +35°C
Application		manual or by spraying at low pressure
Performance characteristics	Standard	Product performance
Class and Type	EN 1504-2	H PI-MC-IR
Water absorption and resistance to alkalis	EN 13580	<7.5%
Absorption of water and alkali resistance after immersion in solution of alkali	EN 13580	<10%
Capillary water absorption	EN 13057	w < 0.1 kg/m ² ·h ^{0.5} - W3
Penetration depth	EN 1504-2 P.19/3	<10 mm - class I
Drying speed for hydrophobing impregnation	EN 13597	>30% - class I
Hazardous substances	EN 1504-2	According note in ZA.1

Test conditions: temperature 23±2°C, 50±5% R.H. and air velocity in test area <0.2 m/s. The values may vary according to the specific job site conditions: temperature, ventilation, absorption of substrate and applied product.

Pursuant to the general principles defined in **EN 1504-2** - General principles for the use of products and systems.

(See previous)

• PRECAUTIONS

- Any alterations to the natural stone colour or supports of various kinds must be tested beforehand on a sample section.
- Crystalline and compact stones like marble are not suitable for impregnation.
- Do not keep the product in humid conditions.

- Do not apply in windy, rainy or sunny conditions.
- **BiolDROCOAT** is not suitable for making chalk water-repellent.

the numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

PACKAGING

5-liters Can

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

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