

IDROCOAT

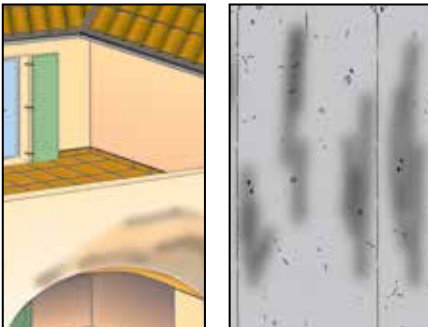
COLOURLESS WATER-REPELLENT PROTECTIVE AGENT WITH HIGH PENETRATION FOR ABSORBENT BUILDING MATERIALS



| CHARACTERISTICS | | ENVIRONMENTAL | METHOD OF USE | | | PRECAUTIONS |
|-----------------|-------------------|---------------|-------------------|----------------|-----------------|-------------|
| | | | | | | |
| SOLVENT BASED | ALLOWS TO BREATHE | | SPRAY APPLICATION | APPLY BY BRUSH | APPLY BY ROLLER | |

PROBLEM

TO PROTECT EXTERNAL WALLS AND ABSORBENT AND POROUS BUILDING MATERIALS



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

SOLUTION

IDROCOAT 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 dissolved in white spirit with high capacity to penetrate into the capillaries of the mineral substrate. **IDROCOAT** reacts with the silicates making up the mineral substrate and with the moisture in the alkaline layer, forming a water-repellent protection. **IDROCOAT** is perfectly transparent, colourless and does not create surface shine.

APPLICATION FIELDS

IDROCOAT is indicated for the protective treatment of all absorbent building materials such as: facing concrete, plaster, cement mortar, sandstone and limestone walls, brick walls, cellular concrete, natural and artificial mineral-based stone, external finishes with



mineral paints, and as an impregnating primer for anti-carbonation external paints such as INDECOLOR. It is ideal for use in the protection of concrete in road construction, bridges, viaducts, guard rails, structures that are subject to disintegrating freeze-thaw cycles and the aggressive action of salts. Impregnation with **IDROCOAT**, in general, is carried out to protect vertical or sloping surfaces from atmospheric precipitation.

ADVANTAGES

- Prevents transport of hygroscopic salts.
- Protects against corrosion by acid rain.
- Protection against bacteria and algae.
- Protects from freeze-thaw cycles.
- High penetration.
- Excellent resistance to alkalis.
- Does not form surface films, high permeability to water vapour.
- Excellent resistance to UV rays.

METHOD OF USE

• PREPARING THE SURFACE TO BE TREATED

Surfaces to be treated which are dirty and covered with micro-organisms and efflorescent salts must first be cleaned with a water jet. Cleaning with hot water or steam 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

IDROCOAT 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 stages, wet on wet, taking care to ensure that the material is saturated and treated evenly. **IDROCOAT** usually needs to

be sprayed until it is no longer absorbed and drips for 50 cm. For small surfaces it can also be applied by roller or paintbrush as long as



the amount applied is enough to saturate the substrate. Wood, glass and plastic surfaces must be protected during application.

• FINISHES

For finishing, **IDROCOAT** can be painted over with normal paints based on synthetic binders.

• COVERAGE

Coverage of **IDROCOAT** applied on:

- Mineral plaster: 0.5-0.8 l/m²;
- Masonry: 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 | IDROCOAT |
|---|-------------------------|--|
| Appearance | | Liquid |
| Colour | | transparent |
| Natura chimica | | silanes-siloxanes in water |
| Density | EN 2811-1 | 0.80 ± 0.05 kg/L |
| Punto di infiammabilità a vaso chiuso | ASTM D 3828-87 | > +21°C |
| Shelf life in original packaging and store in a dry place | | 24 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 S 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 colour of stone or various kinds of support 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 or rainy conditions or in bright sunlight.
- **IDROCOAT** is not suitable for dehumidifying plaster.
- When **IDROCOAT** is applied in closed environments, suitable ventilation must be provided and suitable protective equipment

must be used (masks, etc.).

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.

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

PACKAGING

10-litre Pail.
5-litre Can.

• 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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