

PRODUCT DATA SHEET

PRODUCT NAME

Raymix – ISOSIL SOLVENT WATER REPELLENT

MANUFACTURER

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APPLICATION

Raymix-ISOSIL is a mixture of siloxane compounds dispersed in solvent used for imparting water repellency to absorbent, porous, mineral construction materials, e.g.:

- All kinds of Concrete,
- Natural and cast stone,
- Masonry block,
- Brick facings,
- Precast concrete,
- Clay brick, sand-lime brick work,
- Stucco,
- Chimney,
- Architectural concrete,
- Sandstone,
- Light concrete, gas concrete, aerated concrete,
- Organic plaster,
- Cement fiberboards,
- Mineral plasters,
- Mineral-based natural & artificial stones,
- Mineral paints.

Raymix-ISOSIL is mainly used on vertical surfaces and is only suitable to a limited extent for horizontal surfaces.

Raymix-ISOSIL contains a guaranteed minimum of 7% solids and on application penetrates soft brick works etc... to a depth of 5 mm. In combination with the solvent, which evaporates after application, the effective ingredient penetrates deep into the substrate, hydrolyzes in the pores and capillary chambers and condenses, forming a hydrophobic zone. The active ingredient greatly lowers the water absorbency of the degree of water vapour permeability since neither pores nor capillaries are clogged.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Color	Colorless
Specific gravity	0.777 Kg/Litre
Appearance	Liquid
Odour	Slight hydrocarbon solvent smell
Storage Temperature	0°C to +30°C
Application Temperature	+5°C to +30°C
Flash point	42°C
Tools Cleaning	Turpentine or LAWS if Dry.
Recoat	6 to 8 hours.
Curing time @ 25°C	1 Day (Total Curing)

The information and data given is to the best of our knowledge reliable, but is given without obligation.

IMPREGNATION EFFECTIVENESS

- A façade impregnation based on Raymix-ISOSIL has an extremely long life, provided no chemical damage occurs to the building material.
- Once impregnated a façade can be re-impregnated at any time.
- There are not wetting problems in the use of Raymix-ISOSIL water repellent impregnation.

FEATURES

*	Deep penetrating pore action for long last protection.
*	Prevention of soluble salt blooming. (Efflorescence).
*	Reduction of thermal conductivity, and thus improvement of thermal insulation and protection against frost damage.
*	Reduction of fouling.
*	Low impairment of the breathing activity of the masonry.
*	Generally no visible change in the masonry (does not cause any discoloration).
*	Water barrier not vapor barrier (allows a building to breathe and reduces the danger of condensation).
*	Prevents moss vegetation cover.
*	Keeps building clean and protects against chemical corrosion.
*	High resistance to alkalis.
*	Tack-free drying.
*	Effective even on damp substrates.
*	Rapid development of water repellency.

PROCESSING

- Flooding, preferably not under pressure, is the best technique for applying Raymix-ISOSIL, which is ready to use after dilution. Apply several coats, wet on wet, until the substrate is saturated.
- Generally, at least two applications suffice for all substrates. Do not leave long breaks between coats.
- Apply the next when the substrate has absorbed the previous one and is no longer shiny (wet-on-wet working).
- The substrate must not have damp spots, i. e., it should look dry.
- The requisite quantity of Raymix-ISOSIL depends on the absorbency of the substrate. The amount of impregnating agent required for a substrate and the effectiveness of the impregnation should be determined on site by testing a small area of the material to be treated.

SURFACE PREPARATION

- Cleaning of the façade, which is in most cases necessary, should as fast as possible be carried out using a water or steam jet.
- Salt blooming should be previously removed mechanically. Only in few cases cleaning using chemical cleaners is necessary, in order that the cleaning agent does not penetrate too deep into the substrate.
- The cleaning agent must be extremely carefully rinsed away before impregnation since it has influence on hardening the effective ingredient and may in some cases produce, discoloration (use pH paper) to set a neutral zone.
- It is important that façades are permitted to dry before application of Raymix-ISOSIL water repellent.

APPLICATION

- ✓ Raymix-ISOSIL water repellent is supplied ready to use.
- ✓ It is best to impregnate a façade by means of flooding, i.e. application of sufficient Raymix-ISOSIL water repellent to the surface of the material, permitting it to penetrate into the façade.
- ✓ Raymix-ISOSIL water repellent can also be applied by means of spraying (airless system or hand pump). It should be ensured that Raymix-ISOSIL water repellent is not atomized, spraying distance should therefore be 5 – 15 cm.

- ✓ Brushes or rollers may also be used provided sufficiently high and uniform application of Raymix-ISOSIL water repellent is insured.
- ✓ Impregnation is correctly completed when the material surface is saturated with Raymix-ISOSIL, i.e. no further quantity is absorbed within a period of one minute. Further impregnation may be necessary in case of severely absorptive substrata.
- ✓ The impregnation is already water repellent and rainproof, few hours after treatment, however the effect is further increased and only achieves the long range effect after weeks, depending on atmospheric humidity.
- ✓ The ideal application temperatures are between + 10°C and 25°C.
- ✓ Before impregnating natural stones, try tests as natural stones react in very different ways.

COVERAGE

In order to provide protection Raymix-ISOSIL water repellent should penetrate as deeply as possible in the building material consequently consumption depends on the substrate itself. In some cases, test sections may be necessary to develop a feel for adequate coverage.

The average amount applied per litre, varies relatively to the substrate impregnated.

For this reason, the figures quoted below are intended as a guide only:

Concrete	Litre / m ²	0.25 – 0.50
Plaster	Litre / m ²	0.50 – 1.00
Sand-lime brick	Litre / m ²	0.40 – 0.70
Brickwork	Litre / m ²	0.40 – 2.00
Aerated Concrete	Litre / m ²	0.50 – 2.00
Cement Fiberboard	Litre / m ²	0.10 – 0.30
Natural Stone	Litre / m ²	0.05 – 3.00

CLEANING OF TOOLS

Tools and equipment may be cleaned with Euco solvent, Xylene, Toluene or mineral spirits.



PRECAUTIONS & LIMITATIONS

- Do not use Raymix-ISOSIL over membrane forming sealers. Fresh concrete surface and the joint mortar must have set, i.e. impregnation should be carried out 3-4 weeks after concreting at the earliest.
- Masonry temperature at the time of application should be above 4°C.
- Glass, window, door frames and materials sensitive to solvents must be protected against silicone splashes.
- Plants located in the proximity of the object to be treated must be covered.
- Confirmed or inside areas must be properly ventilated.
- Raymix-ISOSIL water repellent contains aliphatic hydrocarbons and the respective safeguards of individual

countries have to be observed.

- When spraying is being carried out, it is advisable to have operatives suitably dressed i.e. face masks, gloves etc...
- Two coat treatment is recommended on all surfaces.



STANDARDS & NORMS

Raymix-ISOSIL conforms to ASTM C 666, ASTM C 672, BS 6477 and WTA.

QUALITY STANDARDS

Raymix-ISOSIL conforms to ISO 9001.

TECHNICAL SERVICE

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

Contact:

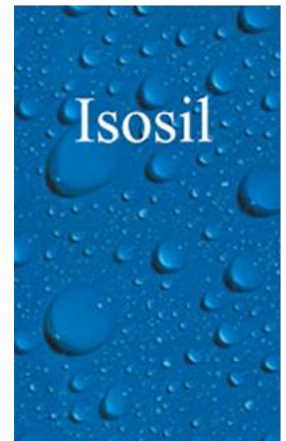
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