SILRES® BS 290 CF

Silane-Siloxane mixtures

SILRES® BS 290 CF is a solvent- and catalyst-free silicone concentrate that is based on a mixture of silane and siloxane. SILRES® BS 290 CF is dilutable with organic solvents.

Dilute solutions of SILRES® BS 290 CF in organic solvents serve as high-quality general-purpose water repellents for impregnating and priming mineral and highly alkaline substrates

Properties

- catalyst free
- good depth of penetration
- high resistance to alkalis
- tack-free drying
- effective even on damp substrates
- rapid development of water repellency

After application to the mineral substrate, SILRES® BS 290 CF reacts with the atmospheric moisture or pore water in the substrate, thereby generating the active ingredient while liberating alcohol. The active ingredient greatly lowers the water absorbency of the substrate, which nevertheless retains a very high degree of water vapour permeability since neither pores nor capillaries are clogged.

Technical data

General Characteristics

Property	Condition	Value	Method
Silane-/Siloxane content	-	approx. 100 %	-
Density	25 °C | 1013 hPa	1.05 g/cm^3	DIN 51757
Viscosity, dynamic	25 °C	15 - 19 mPa·s	DIN 51562
Appearance	-	colorless, hazy	-
Flash point	-	42 °C	ISO 3679

These figures are only intended as a guide and should not be used in preparing specifications.

Applications

- Hydrophobic Impregnation
- Impregnation of New and Existing Buildings
- Primers for Paints & Coatings
- Silicone-Based Primers for Coatings

Application details

SILRES® BS 290 CF is suitable for imparting water repellency to absorbent, porous, mineral construction materials, e. g.:

- brickwork
- all kinds of concrete
- aerated concrete
- sand-lime brickwork
- cement fiberboards
- mineral plasters
- mineral-based natural and artificial stone
- mineral paints

SILRES® BS 290 CF is also suitable as primer for exterior paints.
SILRES® BS 290 CF is not suitable for rendering gypsum water repellent.

Processing

Flooding, preferably not under pressure, is the best technique for applying SILRES® BS 290 CF, 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 longershiny (wet-on-wet working). The substrate must not have damp spots, i. e., it should look dry. The requisite quantity of SILRES® BS 290 CF depends on the adsorbency of the substrate. The amount of hydrophobic impregnating agent required for a substrate and the effectiveness of the hydrophobic impregnation should be determined on site by testing a small area of the material to be treated.

Dilution

The solvents best suited for diluting SILRES® BS 290 CF are aliphatic hydrocarbons (e. g. White Spirit 130/175), aromatic hydrocarbons (solvent naphtha, e. g. Shellsol A) or low-odor isoparaffin hydrocarbons (e. g. Isopar H). The solvent used should have a boiling range of 140-190°C and an evaporation number of 30-90.

If the above-mentioned hydrocarbon solvents are used, SILRES® BS 290 CF should be diluted in a weight ratio of 1:11 to 1:15. Anhydrous alcohols, such as ethanol or 2-propanol, could also be used and are even indispensable whenever contact of the impregnating agent with solvent-sensitive materials (such as expanded polystyrene, bitumen, etc.) cannot be avoided. The alcohol must be completely anhydrous. If alcohol is used as a solvent, a dilution ratio of 1:12pbw is recommended. When impregnating slightly damp substrates, SILRES® BS 290 CF will give better results if diluted with hydrocarbons than with alcohol.

Stir vigorously when adding the diluent to SILRES® BS 290 CF. Since SILRES® BS 290 CF reacts with humidity, prolonged contact with air must be avoided. The containers must be hermetically sealed.

Before applying SILRES® BS 290 CF, be sure to cover windows and other non-absorbent surfaces properly because the product cures so quickly that it will be extremely difficult, if not impossible, to remove after a few hours. Wipe off any splashes on window panes immediately, using a solvent if necessary.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code SILRES® BS 290 CF

For technical, quality or product safety questions, please contact:

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