

SILRES[®] BS 290



Silane-Siloxane mixtures

SILRES[®] BS 290 is a solventless silicone concentrate that is based on a mixture of silane and siloxane. SILRES[®] BS 290 is dilutable with organic solvents.

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

Properties

- 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 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
Appearance	-	colorless, hazy	-
Density	-	-	-
Flash point	-	-	-
Silane-/Siloxane content	-	approx. 100 wt. %	-
Viscosity, dynamic	-	-	-

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

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Primer
- Impregnation of New and Existing Buildings
- Construction Materials
- Hydrophobic Impregnation
- Silicone Primers

Application details

SILRES® BS 290 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 is also suitable as primer for exterior paints.

SILRES® BS 290 is not suitable for rendering gypsum water repellent.

Processing

Flooding, preferably not under pressure, is the best technique for applying SILRES® BS 290, 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 SILRES® BS 290 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 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 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 will give better results if diluted with hydrocarbons than with alcohol.

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

Before applying SILRES® BS 290, 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.

Processing

Beton	[l/m ²]	0.25 – 0.5
Putz	[l/m ²]	0.5 – 1.0
Kalksandstein	[l/m ²]	0.4 – 0.7
Ziegelmauerwerke	[l/m ²]	0.4 – 2.0
Gasbeton	[l/m ²]	0.5 – 2.0
Zementfaserplatten	[l/m ²]	0.1 – 0.3
Naturstein	[l/m ²]	0.05 – 3.0

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



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

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