

# SILRES® BS 2002



#### Silane Emulsions

SILRES® BS 2002 is a water-thinnable, solventless emulsion, based on a mixture of silane and siloxane. Dilute solutions of SILRES® BS 2002 serve as highquality, general-purpose water repellents for impregnating and priming mineral surfaces.

# **Properties**

SILRES® BS 2002 emulsion contains a stabilized mixture of silanes and siloxanes that are susceptible to hydrolysis. Hydrolysis occurs only after application to the substrate, which breaks the emulsion. Alcohol is released and the emulsion is converted into a silicone resin water repellent.

SILRES® BS 2002 reduces the capillary absorption of the building which it has penetrated, but does not clog pores or capillaries. There is therefore little or no impairment of the building material's ability to breathe.

- good depth of penetration
- · resistance to alkalis
- rapid development of water repellency
- provides good adhesion for paints
- water-based and environmentally compatible
- stable in storage, even when diluted

#### Technical data

#### **General Characteristics**

| Property             | Condition | Value                   | Method        |
|----------------------|-----------|-------------------------|---------------|
| Active substance     | -         | approx. 60 wt. %        | -             |
| Appearance           | -         | milky, white            | -             |
| Density              | 23 °C     | 0.960 g/cm <sup>3</sup> | not specified |
| Viscosity, kinematic | 23 °C     | 200 mm²/s               | not specified |
| рН                   | 23 °C     | 9                       | not specified |

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**

- Construction Materials
- Hydrophobic Impregnation
- Impregnation of New and Existing Buildings
- Pre-Impregnation of Construction Materials

# **Application details**

Dilute SILRES® BS 2002 is an excellent water repellent for many absorbent mineral substrates, such as bricks, sand-lime brick, natural sandstone and mineral plasters. It is not so suitable for less absorbent, dense natural stone, especially limestone and marble.

Owing to its aqueous consistency and storage stability when diluted, SILRES® BS 2002 is ideal for inplant impregnation of building materials made of clay, aerated concrete, sand-lime brick, fibrous cement, mineral fibers and lightweight aggregate.

SILRES® BS 2002 may also serve as a water-repellent primer for emulsion paints and plasters, silicone resin emulsion paints and silicone resin plasters.

## **Dilution**

In case of partial emptying of the container, the product should be stirred for a few minutes at 100 to maximum 200 RPM. Especially in the warm season or after a long storage time, water may evaporate from the product surface, which may lead to thickening of the upper phase. The creamy consistency is dissolved again by stirring in and optimally distributed in the product.

Tap water is suitable for preparing solutions of SILRES® BS 2002 for use as facade water repellent primer. We recommend an active substance content of 5-10% (dilute the product in the ratio 1:5 to 1:11), the exact figure depending on how absorbent the substrate is.

Apply the ready-to-use solution in the usual way; flooding is the preferred way. Two "wet on wet" coats are needed to ensure complete coverage. Owing to the content of wetting agent in SILRES® BS 2002, reimpregnation at a later date does not present any difficulties.

If it starts raining, stop treatment and cover the freshly impregnated areas.

Before creating a test area or carrying out a large-area product application, the dilution and application recommendations by the supplier should be followed.

#### 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. The more dilute they are, the more they tend to cream. However, this phase separation may be reversed by brief stirring or agitation. This will restore it to a homogeneous emulsion, without loss of efficacy. SILRES® BS 2002 contains minor amounts of a preservative that protects the emulsion against microbial contamination and fungal attack. The quality of the water used may make it necessary to add a biocide after dilution in principle, nearly any water-based preservative may be used.

# 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 2002



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

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