

# SILRES<sup>®</sup> BS 1316



## Silanes

SILRES<sup>®</sup> BS 1316 is used undiluted as a water-repellent primer and impregnating agent for normal and reinforced concrete.

SILRES<sup>®</sup> BS 1316 is a mixture of isomeric octyltrimethoxysilanes with isooctyltrimethoxysilane as main component.

## Properties

- greatly delays chloride and water absorption by concrete
- reduces loss of concrete due to freeze / thaw action in the presence of de-icing salt
- high resistance to alkalis
- good depth of penetration
- low volatility

After application to the concrete, SILRES<sup>®</sup> BS 1316 reacts with the atmospheric moisture and pore water in the concrete, thereby generating the active ingredient while liberating alcohol. The active ingredient greatly lowers the water absorbency of the treated concrete, 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	-	clear, colorless	ASTM D 2240
Boiling point	969 hPa	210.8 °C	OECD 103
Density	20 °C	0.9 g/cm <sup>3</sup>	DIN 51757
Flash point	-	52 °C	ISO 2719
Molecular weight (Mw)	-	approx. 234.0 g/mol	-
Silane content	-	approx. 100.0 %	-
Viscosity, dynamic	20 °C	1.88 mPa-s	DIN 51562

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

- Infrastructure
- Construction Materials
- Concrete Protection
- Concrete
- Concrete Admixtures

## Application details

SILRES® BS 1316 is recommended as a water-repellent impregnating agent and primer for normal and reinforced concrete for bridges, roads and buildings.

### Processing

Liberally apply two coats (wet-on-wet) of the impregnating agent uniformly to the concrete. Two coats are needed to ensure that all of the surface is covered. Do not allow puddles to form.

Apply as usual with a low-pressure airless spray, allowing the impregnating agent to flood over the surface. Perhaps use a roller afterwards to distribute the impregnating agent more evenly.

- Allow fresh concrete at least four weeks (preferably six) to set before impregnating it.
- Remove coarse particles and dust from new, unsoiled surfaces with a brush or compressed air. Use superheated steam to clean weathered surfaces that are heavily soiled with oil, abraded rubber, etc., prior to treatment.
- Only impregnate concrete that has a uniformly dry surface with no damp patches. Should it suddenly start to rain, stop treatment and cover the impregnated areas.

## Dilution

SILRES® BS 1316 is normally used undiluted.

## 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 1316



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

**Wacker Chemie AG**, Hanns-Seidel-Platz 4, 81737 Munich, Germany  
[info@wacker.com](mailto:info@wacker.com), [www.wacker.com](http://www.wacker.com)

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.