

WACKER

CREATING TOMORROW'S SOLUTIONS

SILRES®

SILRES® BS – THE ELEMENT
OF SUCCESS FOR
CONCRETE PROTECTION

SILRES® BS – LONG-LASTING AND COST-EFFICIENT CONCRETE PROTECTION

Protection from Within

SILRES® BS silanes and siloxane emulsions penetrate the substrate instead of just forming a protective film on the surface.

Even When Cracks Appear

With SILRES® BS, the concrete's pores remain open after water-repellent treatment, so that water-vapor and gas diffusion are not measurably influenced. Thus, the concrete's natural properties are retained, and even when the surface is damaged (crack formation) it remains adequately protected.

For a Longer Service Life

As a result, the water-repellent treatment has a significantly longer service life. Film-forming coatings easily flake off as they don't allow water to pass out.

Solvent-Free Protection

The novel SILRES® BS 1803 protects concrete against water uptake and any resulting damage such as efflorescence. Based on organomodified silanes and siloxanes, the solvent-free emulsion produces a matrix that ensures a strong protective beading effect, which resists water absorption without blocking pores or capillaries. SILRES® BS 1803 can be used as a posttreatment or concrete admixture in all non-load-bearing, cement-based building materials. Admixture concentrations as low as 0.2% can significantly reduce water uptake. Once treated, the water repellency of the concrete prevents damaging water or chemicals from being absorbed, extending the life of the building material.

	Post treatment	
Benefits	• Excellent solution for standard and reinforced concrete	• Premium, user-friendly one-step application
Product group	Silanes	Silane/siloxane emulsions
Properties		
Active ingredient	100	80
Characteristics		
Hydrophobic impregnation of concrete (EN 1504-2)	●	●
Concrete admixture: Mass treatment (EN 934-2)		
Admix for waterproof concrete		
Surface treatment	●	●
Antiefflorescence for concrete pavers and blocks		
Product	SILRES® BS 1701	SILRES® BS Creme C

Applications

Treatment of concrete structures such as bridges (infrastructure) and waterproof concrete (construction) at production or later (post treatment).

SILRES® BS Water Repellents Achieve

- Drastic reduction in water uptake
- Chloride barrier and thus protection against reinforcement corrosion
- Retention of high water-vapor permeability
- Extensive penetration
- High UV resistance
- Surfaces not rendered shiny or tacky, or caused to yellow
- Adequate resistance to alkalis
- Safe use
- Exemplary environmental compatibility



Mass treatment

• Silane for load-bearing applications

• Silane emulsion for load-bearing application with excellent miscibility

• Silane/siloxane for in-mass treatment

Silanes

Silane/siloxane emulsions

Silane/siloxane emulsions

100

Approx. 50%

Approx. 60%

-
-

-
-

-

SILRES® BS
1801

SILRES® BS
1802

SILRES® BS
1803

WACKER

Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München, Germany
Tel. +49 89 6279 -1741
Fax +49 89 6279 -1770
info@wacker.com

www.wacker.com/socialmedia



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.