

SILRES[®] BS 1801



Silanes

SILRES[®] BS 1801 is a mixture of octyltriethoxysilanes isomers, with iso-octyltriethoxysilane as the main component. SILRES[®] BS 1801 is used in undiluted form as an admixture for the integral waterproofing of fresh concrete.

Properties

In the fresh concrete SILRES[®] BS 1801 reacts with the water in the building material's pores, eliminating alcohol. The active thus substance formed greatly reduces the concrete's absorbency, but without blocking any pores or capillaries. The impregnated building material retains very high water-vapor permeability.

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	clear, colorless	WSTM-1228
Boiling point	1013 hPa	237 °C	OECD 103
Density	20 °C 1013 hPa	0.88 g/cm ³	DIN 51757
Flash point	-	42 °C	ISO 3679
Molecular weight (Mw)	-	276.0 g/mol	-
Silane content	-	99.0 %	-
Viscosity, dynamic	25 °C	1.9 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

- Concrete Admixtures

Application details

The recommended admixture range for SILRES® BS 1801 is 0.1 % to 1.0 % of the cement content. A significant reduction in water uptake can already be achieved at a concentration of 0.2 % of the cement. SILRES® BS 1801 is added either simultaneously with or immediately after the mixing water – it should never be added along with other additives. We recommend testing compatibility with other concrete admixtures separately. A longer mixing time will thoroughly distribute the product within the overall system, which in turn will make it highly effective. An initial test according to DIN Technical Report 100, section 9.5, (alternative: EN 206-1 and EN 1045-2) must be conducted for each new concrete composition. Finer adjustment of the fresh and set concrete properties by, for instance, varying the binder content pursuant to EN 206-1 and EN 1045-2 is recommended on a case-by-case basis. The concrete may harden more slowly during the first days in isolated cases. When used in concrete goods or similar concrete products according to EN 1338, 1339 or EN 1340, an initial-type test (cf. section 6.2 of the respective standard) is recommended.

SILRES® BS 1801 is recommended as a waterproofing concrete admixture.

Packaging and storage

Storage

The containers must be protected against sunlight. 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 1801



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, 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.