SILRES® BS 5350

Silicone Fluids (INCI)

SILRES® BS 5350 is a neat liquid siloxane used to impart water repellency to autoclaved aerated concrete AAC (also ALC) and to strongly reduce its capillary water absorption. It can be used for all produced densities above 150 kilograms per cubic meter.



Properties

Even though SILRES® BS 5350 is not water-based and contains no surfactants or solvents, as a so-called integral or in-mass hydrophobizing additive it is commonly used in the aqueous AAC slurry and disperses by the shear forces between liquids and solids in the mixer.
SILRES® BS 5350 can strongly reduce the water absorption of AAC (determined according to EN 772-11), but in contrast to other hydrophobizing additives at the same time has only neglectable influence on compressive strength and pore size distribution or thermal conductivity. No noteworthy influence on green strength has been observed in the recommended dosage range.
Furthermore, no negative effects on the adhesion strength of cementitious AAC thin bed adhesives have been observed.

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	colorless, clear liquid	-
Density	25 °C	approx. 0.97 g/cm^3	DIN 51757
Flash point	-	341 °C	ISO 2592
Ignition temperature (liquids)	-	approx. 450 °C	DIN 51794
Odour	-	odourless	-
Surface tension	25 °C	0.021 N/m	-
Viscosity, dynamic	25 °C	500 mPa·s	DIN 53019
Viscosity, kinematic	25 °C	approx. 500 mm^2/s	DIN 53019

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

- Insulation Materials

Application details

SILRES® BS 5350 is used as a so-called integral or in-mass hydrophobizing additive, which means that it is added to the water-based AAC slurry already at the slurry mixer. A common dosage level is 0.2 % by weight based on the overall solids in the AAC slurry.
Nevertheless, depending on the type of recipe and the produced density, orientating trials should preferably start at a dosage level between 0.1 and 0.15 % in order to ensure sufficient green strength.

Packaging and storage

Storage

Maximum temperature allowed during storage and transportation: 50 °C.
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 5350

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

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