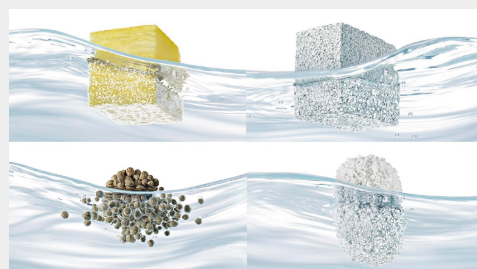


# SILRES<sup>®</sup> BS 1042



## Silicone Fluid Emulsions

SILRES<sup>®</sup> BS 1042 is an aqueous emulsion of a reactive polydimethylsiloxane. It is used to impart water-repellency to glass wool mat or rock wool mat bound with phenolic resin or to low-density bulk goods such as perlite or vermiculite.



## Technical data

### General Characteristics

Property	Condition	Value	Method
pH	20 °C	5 - 8	Indicator strips
Active content	-	~ 60.0 wt. %	-
Appearance	-	white, milky liquid	-
Density	20 °C	approx. 1 g/cm <sup>3</sup>	-
Ignition temperature	-	420 °C	DIN 51794
Melting point	-	-1 °C	-

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

To impart water repellency to glass wool or rock wool, SILRES® BS 1042 can be mixed with the phenolic resin solution or other additives. As the stability of the obtained mixtures greatly depends on the composition of the phenolic resin or the additives, no general comments can be made on compatibility.

With suitable equipment, SILRES® BS 1042 can either be applied at the same time as or shortly before application of the binder.

Treatment of glass wool mat or rock wool mat with SILRES® BS 1042 after drying and hardening is not recommended.

SILRES® BS 1042 is applied by spraying. For this purpose it can be diluted with any quantity of water.

The usual amount of SILRES® BS 1042 applied ranges between 0.2 and 2 % based on the weight of material to be treated.

The quantity of SILRES® BS 1042 to be applied depends on the desired water repellency of the end product; a general recommendation cannot be given. Individual tests must always be conducted in order to define the necessary quantity.

Excess SILRES® BS 1042 will cause a significant deterioration of the water repellent effect in perlite or similar materials.

To impart water repellency to perlite or similarly porous materials, SILRES® BS 1042 is applied by spraying as well. It can be sprayed onto the warm material in order to avoid an additional drying process. Prolonged heating of the siliconized material must however be avoided.

Guide formulation for laboratory tests to make perlite water-repellent:

Mix 0.80 g SILRES® BS 1042 with 400 g of deionized water. Thoroughly mix or spray 200 g of perlite with this impregnating solution in a mixer until the liquid has been completely absorbed. Fill the moist material into a large dish and dry in a drying oven at 50 °C for seven days.

Fill the impregnated perlite into fine-meshed nylon sacks and immerse in deionized water. The sacks must be covered by 5 cm of water.

Weigh the samples at fixed intervals. The results show that the perlite absorbs about 5 % of its dry weight in water after one day. Untreated perlite absorbs far more than 100 % of its dry weight in water in the same period. The test for water repellency according to ASTM 303-77 is recommended.

## Packaging and storage

### Storage

SILRES® BS 1042 must be stored in the tightly closed original container. 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 1042



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

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