

# SILRES<sup>®</sup> BS 46



## Silicone Fluid Emulsions

SILRES<sup>®</sup> BS 46 is an aqueous, solventless emulsion based on polymethylhydrogensiloxane.

## Technical data

### General Characteristics

Property	Condition	Value	Method
Appearance	-	milky-white liquid	ASTM D 412
Active substance	-	50.0 wt. %	-
Density	20 °C	1 g/cm <sup>3</sup>	DIN 51757
Ignition temperature (liquids)	-	315 °C	DIN 51794
Odor	-	like acetic acid	-
pH	500 g/l   20 °C	approx. 3 - 5	Indicator strips

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

- Gypsum Wallboards and Gypsum Fiberboards

## Application details

SILRES® BS 46 is added to the mixing / gauging water of the plaster. The addition of just 0.2-0.8% SILRES® BS 46, expressed in terms of the plaster, effects a marked reduction in water absorbency as required by DIN EN 520. The efficiency of SILRES® BS 46 depends on the kind of plaster, on the water / gypsum ratio and on additives such as starch / cellulose or surfactants. This is why no general recommendations on the dosage of <(> <<)>productname> can be given. Preliminary tests are always necessary for establishing the required amount. Alkaline components of the plaster may lead to diminution of the bulk density and the water repellency of the plaster elements. SILRES® BS 46 is not recommended for surface treatment of plaster elements. Suggested formulation for laboratory tests: 2,50g of SILRES® BS 46 is mixed into 400g of deionized water with a turbine mixer (at least 1,000 rpm) for 30 seconds. 500g of plaster of paris is added to this mixture. The mixture is stirred with a paddle mixer for one minute and then poured into PVC rings (diameter: 8cm, height: 3cm). After setting, the samples are removed from the PVC rings and dried for 24 hours at 40°C in an exhaust-air drying cabinet with open flap. Subsequently, the samples are dried for six days at room temperature during that time they will reach their constant weight. To determine water absorbency, the samples are placed horizontally into deionized water so that they are covered by 5cm of water (DIN EN 520). After 2 hours they are taken out, the remaining drops on the surface are removed and the samples are weighed. The mean water absorbency of at least 3 samples is calculated terms of the dry weight of the plaster samples before immersion in water. Untreated samples produced by the same method have a water absorbency of about 50%. Water-repellent treatment of plaster elements and plasterboard.

## Packaging and storage

### Storage

SILRES® BS 46 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>. 1 space line

## QR Code SILRES® BS 46



### 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)

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