SILRES® WH

Silicone Resin Emulsions

SILRES® WH is a water thinnable, solventless emulsion of a functional silicone resin.

Properties

Dilute solutions of SILRES® WH serve as high-quality water repellents for impregnating wood surfaces. Undiluted SILRES® WH may also serve as high-quality hydrophobizing additive for aqueous wood coatings/wood stains.

- water based
- development of longlasting beading effect on wood
- significant reduction of capillary water absorption of wood, particularly after weathering
- no protection against degradation of lignin by UV radiation and accompanying graying (UV transparent)
- increases the durability and longevity of wood stains/coatings for wood because of excellent hydrophobizing properties
- helps to minimize all harmful effects caused by water uptake
Technical data

General Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>appearance and color</td>
<td>-</td>
<td>milky, white</td>
<td>ASTM D 412</td>
</tr>
<tr>
<td>Density</td>
<td>23 °C</td>
<td>approx. 1 g/cm³</td>
<td>DIN 51757</td>
</tr>
<tr>
<td>Solid content</td>
<td>-</td>
<td>approx. 54 wt. %</td>
<td>-</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>23 °C</td>
<td>approx. 35 mPa-s</td>
<td>Brookfield</td>
</tr>
<tr>
<td>pH</td>
<td>23 °C</td>
<td>approx. 6</td>
<td>Indicator strips</td>
</tr>
</tbody>
</table>

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

- Wood Coatings

Application details

For the use as hydrophobic impregnant for wood SILRES® WH has to be diluted with water. We recommend a solid content of 5-10% (dilute the product in the ratio 1:4 to 1:9), the exact figure depending on how absorbent the substrate is. The application on wood is done by brushing, spraying or flooding. SILRES® WH is used in undiluted form as hydrophobizing additive for aqueous wood stains/wood coatings during or after their production. Wood stains/wood coatings modified with SILRES® WH are characterized by excellent water repellency and outstanding water resistance, especially after weathering. The addition of 1 wt.% to 3 wt.% is recommended.

Packaging and storage

Storage

The product or dilutions thereof should be stirred well before use. 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.
For technical, quality or product safety questions, please contact:

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