SILRES® REN 60

Silicone Resins

SILRES® REN 60 is a medium hard methyl phenyl silicone resin supplied as 60 wt.%-solution in xylene.

Typical application of SILRES® REN 60 is the use as binder for heat-resistant anticorrosive coatings.

Properties

SILRES® REN 60 offers the following properties:
- Silicone resin with medium molecular weight
- very good balance of flexibility, hardness, heat resistance and tack-free air drying at room temperature
- very low viscosity
- medium hardness
- compatibility with organic resins (but preferably used as a sole binder)
- excellent hydrophobicity and corrosion-protection

Technical data

General Characteristics

Property	Condition	Value	Method
Solid content	200 °C | 1 h	approx. 60 wt. %	-
Appearance	-	clear, colorless to slightly yellow liquid	-
Density	20 °C	1.05 g/cm^3	DIN 51757
Flash point	-	25 °C	DIN 51755
Ignition temperature (liquids)	-	510 °C	DIN 51794
Solvent	-	Xylene	-
Viscosity, kinematic	25 °C	45 - 75 mm^2/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.

Store in a dry and cool place.

Protect against moisture.

Applications

- Heat-Resistant Coatings
- Industrial Coatings

Application details

SILRES® REN 60 is mainly used as binder for coatings. It combines outstanding heat resistance and weatherability, dries to tack-free film at ambient temperature.

Heat-resistant Coatings

SILRES® REN 60 is especially suitable for all kinds of heat-resistant paints. It is an excellent choice for (anti-corrosion) coatings on fireplaces, mufflers, exhaust systems, engine parts, boilers, furnaces, ovens and oven inserts, chimneys, barbeques, electric/gas heaters, incinerators.
High-heat resistant coating formulations with SILRES® REN 60 in combination with suitable temperature stable pigments and fillers can achieve thermal stability up to 650°C (1100°F) . Aluminum pigments can be used for silver/grey colors and black pigments like iron managnese oxides or copper chromite black spinels for dark black coatings. Platelet-shaped inorganic fillers/extenders like mica or talc are suitable for such formulations. The pigments and fillers must be properly dispersed in the paint. Degreasing/Cleaning and sandblasting of the substrate are recommended for obtaining optimum corrosion resistance and heat stability on metal surfaces. The adhesion will always depend on the specific coating formulation, too. Coating application can be done by spraying, dipping and brushing.
Coatings made with SILRES® REN 60 dry at room temperature to tack-free films which already provide temporary corrosion protection. A initial baking step at 200°C/1h has proven to effectively reduce the risk of cracking at extreme temperatures. The coating films will develop their final properties only after prolonged exposure to temperatures > 400°C.

Formulation examples are available on request.

Information on the current BfR/FDA-status is available on request.

Packaging and storage

Packaging

- 25kg Steel can
- 180kg Steel drum
- 950 kg IBC

Storage

SILRES® REN 60 must be stored in tightly closed original containers with exclusion of moisture. Contact with tin (e.g. with improper metal containers) or moisture will cause gelation.
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® REN 60

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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@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.