

# POWERSIL<sup>®</sup> 420

## Silicone Rubber Dispersions

POWERSIL<sup>®</sup> 420 is an electrically conductive silicone rubber dispersion in Xylene. POWERSIL<sup>®</sup> 420 can be used as conductive coating.

### Properties

- electrically conductive coating
- low volume resistivity

### Specific features

- Coating
- Electrically conductive

## Technical data

### Properties Uncured

Property	Condition	Value	Method
Color	-	black	-
Solid content	-	15 %	-
Viscosity, dynamic	23 °C	17000 mPa·s	Brookfield
Pot life <sup>(1)</sup>	-	3 d	-

<sup>1</sup>at 23°C

These figures are only intended as a guide and should not be used in preparing specifications.

### Properties Cured

Cure conditions: 30 min / 150°C in a circulating air oven

Property	Condition	Value	Method
Density	23 °C	1.24 g/cm <sup>3</sup>	DIN EN ISO 1183-1 A
Volume resistivity	-	1 Ohmcm	IEC 62631-3-1

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

- Cable Accessories

## Application details

- cable accessories
- electrodes
- deflectors

## Processing

After stirring up POWERSIL® 420, 0.75 % Crosslinker W, 0.3 % Inhibitor Pt 88 and 0.05 % Catalyst EP are separately added and stirred thoroughly.

At room temperature the pot life is at least 3 days.

Surfaces to be treated should be dry and free of grease, oil and other contaminants. For cleaning chemically pure solvents e. g. acetone can be used.

The dispersion of POWERSIL® 420 can be applied by dipping, spraying and with a brush. For electrically conductive coatings we recommend a curing - after air drying for approx. 5 min at room temperature - of at least 30 min at 150 °C. Coatings made from POWERSIL® 420 don't need any post-curing as there are no byproducts released during crosslinking. As a general rule the individual processing conditions must be optimized for the specific application.

Various substances can poison the platinum catalyst and delay vulcanization or, in extreme cases, prevent it entirely.

Particularly critical catalyst poisons are:

Sulphur, polysulfides, polysulfones and compounds containing sulphur, such as natural and synthetic rubber. Amines, urethanes and substrates containing amines, such as polyurethanes, epoxy resins etc.

Organometallic compounds, especially organo-tin, and substances containing such compounds. Sticky areas are signs of inhibition.

For detailed information, refer to brochures on [www.wacker.com](http://www.wacker.com).

## Packaging and storage

### Storage

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 POWERSIL® 420



### 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)

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.