

WACKER SiGel® 616

Silicone Gel

Characteristics

WACKER SiGel® 616 is a pourable, addition-curing, two-component silicone rubber that cures at room temperature.

WACKER SiGel® 616 cures to a very soft, gel-like vulcanizate.

Special characteristics

- Very low viscosity
- Very low hardness (silicone gel)
- Transparent vulcanizate
- Pronounced tackiness
- Excellent mechanical damping properties

Application

- Potting of electronic devices
- LV easy-to-use Cable Joints

Product data (uncured)

Property	Test method	Unit	Value	
Component			A	B
Color			Transparent	Transparent blue
Viscosity at 23 °C	ISO 3219	[mPa s]	250	200
Density at 23 °C		[g/cm³]	0.97	0.97

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

Product data (catalyzed A+B)

Property	Test method	Unit	Value
Platinum-catalyst in component			B
Mixing ratio		A : B	1 : 1
Viscosity of mix	ISO 3219	[mPa s]	250
Pot life at 23 °C		[h]	1

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

Product data (cured)

Property	Test method	Unit	Value
Color			Transparent blue
Specific gravity	ISO 2781	[g/cm³]	0.97
Penetration (150 g hollow cone)	ISO 2137	[mm/10]	280
Volume resistivity, measured dry at 23 °C	IEC 60 093	[Ω cm]	10 ¹⁶
Dielectric constant (50 Hz)	IEC 60 250	[ε _r]	2.8

Cured for 30 min at 150 °C in circulating air oven

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Processing

Important

The platinum catalyst is contained in component B.

Caution

Only A and B components with the **same batch number** may be processed together!

Temperature	Curing time, 1 cm
23 °C	4 h
100 °C	15 min
150 °C	5 min

The reactivity can be adjusted within wide limits by adding Catalyst EP or Inhibitor PT 88 to suit the processing requirements of the particular application. Catalyst EP increases the reactivity, ie, pot life and curing time are reduced.

Inhibitor PT 88 is a pot life extender and prolongs pot life and curing time.

Further informations are given in our leaflet "Catalyst EP/Inhibitor PT88".

If the gel is too soft and tacky, reducing the amount of component B will result in a harder, less tacky vulcanizate. The hardest formulation is achieved with a mixing ratio for A : B of roughly 1.5 : 1.

Tack-free surfaces can be achieved by coating with ELASTOSIL® RT 601.

We recommend running preliminary tests to optimize conditions for the particular application.

Comprehensive processing instructions are given in our leaflet "Wacker RTV-2 Silicone Rubber-Processing".

Pigmentation

WACKER SilGel® 616 can be pigmented by adding 1-4 % of an ELASTOSIL® FL pigment paste.

Storage stability

WACKER SilGel® 616 has a shelf life of at least 12 months when stored between 5 °C and 30 °C in the originally sealed container. The 'Best use before end' date of each batch appears 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 information

According to the latest findings, the addition-curing silicone rubber WACKER SilGel® 616 contains neither toxic nor aggressive substances which would require special handling precautions. General industrial hygiene regulations should be observed.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries.

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001. The Business Unit Elastomers of the Division Silicones is ISO/TS 16949 certified.

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

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