

SEMICOSIL[®] 924



Thermally Curing Silicone Rubber (RTV-2)

SEMICOSIL[®] 924 is a pourable, thermally curable, addition-curing one-part silicone rubber that cures to a very soft silicone gel.

Properties

- one-part, ready-to-use
- thixotropic flow
- forms a soft gel on vulcanization
- low content of volatiles
- low content of uncured polymer
- low ion content
- almost constant properties between -50 °C and $+180\text{ °C}$

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	translucent	-
Viscosity, dynamic (D = 0,5 1/s)	23 °C	35000 mPa·s	ISO 3219
Viscosity, dynamic (D = 100 1/s)	23 °C	2000 mPa·s	ISO 3219
Density	20 °C	approx. 0.97 g/cm ³	DIN 51757

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

Properties Cured

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

Property	Condition	Value	Method
Color	-	translucent	-
Density	23 °C	0.98 g/cm ³	DIN EN ISO 1183-1 A
Extractable Ion Content (Na, K, Li, Cl)	121 °C 48 h	5 ppm	-
Hardness penetration (quarter cone, 9.38 g)	-	50 1/10mm	-

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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.

Application details

Because of the thixotropic behavior, SEMICOSIL® 924 is specially recommended for local encapsulation of delicate electronic components, e.g. bonded chips on hybrid components which are exposed to extreme external influences.

Processing

Surface preparation

All surfaces must be clean and free of contaminants that will inhibit the cure of SEMICOSIL® 924. Examples of inhibiting contaminants are sulfur containing materials, plasticizers, urethanes, amine containing materials and organometallic compounds – especially organotin compounds. If a substrate's ability to inhibit cure is unknown, a small scale test should be run to determine compatibility.

Temperature	Curing time, thickness 1 cm
100 °C	240 min
130 °C	40 min
150 °C	10 min

Dispensing

Because of the thixotropy (shear thinning effect) SEMICOSIL® 924 can be dispensed easily with all dispensing equipments.

To eliminate any air introduced during dispensing or trapped under components or devices a vacuum encapsulation is recommended.

Curing

SEMICOSIL® 924 works best when cured at 100 °C or more depending on the size and heat sink properties of the components.

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, i. e., pot life and curing time are reduced.

Inhibitor PT 88 is a pot life extender and prolongs pot life and curing time. Further information is given in our leaflet "Catalyst EP/Inhibitor PT88".

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

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

According to the latest findings, the addition-curing silicone rubber SEMICOSIL® 924 contains neither toxic or corrosive substances which would require special handling precautions.

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 SEMICOSIL® 924



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

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