

ELASTOSIL® E50 N

RTV-1 SILICONE RUBBER

Product description

ELASTOSIL® E50 N is a flowable silicone rubber with good mechanical properties, which cures at room temperature under the influence of atmospheric moisture.

Special features

- acetic acid-curing system
- flowable
- solventless
- excellent primerless adhesion to many substrates

Properly post-cured vulcanizates of ELASTOSIL® E50 N are suitable for use under the Recommendation "XV. Silicones" of the BfR and under the FDA 21 CFR § 175.105 Adhesives, § 175.300 "Resinous and polymeric coatings" and § 177.2600 "Rubber articles intended for repeated use" under observance of any given limitations on extractable and volatile substances. Residual solvents have to be completely removed from the food contact article.

Application

- multipurpose glue, in particular for food related applications
- textile coatings

Processing

ELASTOSIL® E50 N cures at room temperature under the influence of atmospheric moisture:

Skin-forming time, 23 °C, 50 % RH 8 - 20 min

Curing time, 23 °C, 50 % RH 12 h/mm

The fully cured material typically shows good primerless adhesion to many substrates. We recommend to run preliminary tests to optimize conditions for the particular application.

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

During vulcanization of ELASTOSIL® E50 N, a total of 3% by weight of acetic acid is split off. These vapors should not be inhaled for long periods or in high concentration. Work areas should therefore be well ventilated. Contact of unvulcanized silicone rubber with eyes and mucous membranes must be avoided as this would cause irritation. However if it does happen, rinse the affected area thoroughly.

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>.

Product data

Typical general characteristics	Inspection Method	Value
Product data (uncured)		
Color		translucent
Density at 25 °C, at 1013 hPa	DIN 53217	1,09 g/cm ³
Viscosity, dynamic at 25 °C		50000 mPa.s
Skin forming time at 23 °C, 50 % RH		8 - 20 min
Curing time at 23 °C, 50 % RH		12 h/mm
Product data (cured)		
Color		translucent
Density at 23 °C in water	ISO 2781	1,07 g/cm ³
Hardness Shore A	ISO 868	35
Elongation at break	ISO 37	150 %
Tensile strength	ISO 37	1,50 N/mm ²
Tear strength	ASTM D 624	5 N/mm

Curing conditions: 2 mm, 14 days storage at 23 °C and 50 % RH.

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



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.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

WACKER® is a trademark of Wacker Chemie AG. ELASTOSIL® is a trademark of Wacker Chemie AG.

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

Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München, Germany
info.silicones@wacker.com

www.wacker.com