

ELASTOSIL[®] N199 TRANSPARENT



Moisture Curing Silicone Rubber (RTV-1)

ELASTOSIL[®] N199 TRANSPARENT is a non-slump, neutral-cure silicone sealant which cures at room temperature under influence of atmospheric moisture.

ELASTOSIL[®] N199 TRANSPARENT exhibits excellent primerless adhesion to many substrates high tear strength

Properties

- Ready-to-use
- Medium hardness
- High flexibility
- Excellent adhesion
- translucent

Specific features

- Adhesion & Strength: Excellent adhesion
- Adhesion: Non-corrosive to metals
- Crosslinking Property: One-component
- Product Rheology: Non-slump
- Specific Features: High tear-resistant
- Specific Features: One-component
- Surface Effect: Excellent adhesion

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	translucent	-
Viscosity, dynamic D = 0.5 1/s	25 °C	1200000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic D = 25 1/s	25 °C	1000000 mPa·s	DIN EN ISO 3219
Curing time	23 °C 50 % r.h	2 - 2.5 mm/d	-
Density	23 °C	approx. 1.07 g/cm ³	ISO 1183-1 A
Extrusion rate - mass flow (3 mm nozzle)	0.21 N/mm ² 23 °C	14 g/10s	-
Skin forming time	23 °C 50 % r.h	30 min	-

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

Properties Cured

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

Property	Condition	Value	Method
Density in water	23 °C	1.09 g/cm ³	DIN EN ISO 1183-1 A
Hardness Shore A	-	35	DIN ISO 48-4
Tensile strength ⁽¹⁾	-	4.90 N/mm ²	ISO 37
Elongation at break ⁽²⁾	-	500 %	ISO 37

¹Type 3 / 23°C / 2mm

²Type 3 / 23°C / 2mm

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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.

Applications

- Adhesives
- Electrics & Electronics
- Formed-In-Place-Gaskets (Wet Type)

Application details

Multipurpose adhesive / sealant for the electronics industry, typical use for CIPG- and FIPG-applications

Processing

ELASTOSIL® N199 TRANSPARENT is a one-part room temperature vulcanizing sealant that cures to a flexible silicone rubber on exposure to water vapor in the air. During the curing process a small amount of an oxime is released. The crosslinking starts at all places where the paste comes into contact with atmospheric moisture and proceeds from the outer to the inner parts of the silicone. After about 30 minutes a skin of cured material is formed at the surface. After formation of a sufficiently thick skin, glued parts may be handled without destruction.

For the crosslinking to take place, water vapor from the air is necessary. For this reason the curing rate strongly depends on the atmospheric humidity in the surrounding. The higher the atmospheric moisture the faster the material will be cured fully. The temperature has a great influence on the curing rate as well. The higher the temperature the faster the material will be fully cured.

If removing of silicone rubber from machines or dispensing equipment is necessary, white spirit is recommended as a solvent. However, cleaning should take place before the rubber is fully cured. Afterwards only the use of mechanical forces in combination with a swelling solvent or the use of high temperatures of approximately 100°C will help to remove sealant residues.

ELASTOSIL® N199 TRANSPARENT shows good primerless adhesion to many substrates. We recommend running preliminary tests to optimize conditions for the particular application.

Detailed processing instructions are given in our brochure "ROOM TEMPERATURE VULCANIZING (RTV) SILICONES - MATERIAL AND PROCESSING GUIDELINES"

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

During vulcanization of ELASTOSIL® N199 TRANSPARENT, a total of 4% by weight of an oxime is being split off. These vapours 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 with water.

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 ELASTOSIL® N199 TRANSPARENT



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

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