

ELASTOSIL[®] N9111 BLACK



Moisture Curing Silicone Rubber (RTV-1)

ELASTOSIL[®] N9111 BLACK is a non-slump, alkoxy-cure, one-part silicone, which cures at room temperature under the influence of atmospheric moisture.

Fully cured ELASTOSIL[®] N9111 BLACK has excellent flame retardant properties and shows long-term stability against weathering, moisture and sunlight.

Properties

- Excellent adhesion to many substrates
- No inhibition effect on platinum-catalysed grades
- No use of organotin catalysts
- Medium hardness Shore A
- High Limiting Oxygen Index (LOI)
- Flame retardant: meets UL94 V-0 and the requirements of DIN EN 45545-2:2020 for Hazard Level HL1 and HL2 (as per requirement set R22), and for Hazard Level HL1, HL2 and HL3 (as per requirement set R23 and R24, respectively).
- Recommended service temperature from -45 °C to +180 °C

Specific features

- Flame retardant
- Non-slump
- Thixotropic
- Tin-free catalysis

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	black	-
Density	23 °C	1.30 g/cm ³	DIN EN ISO 1183-1 A
Viscosity, dynamic D = 0.5 1/s	25 °C	1000000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic D = 25 1/s	25 °C	100000 mPa·s	DIN EN ISO 3219
Skin formation time	-	20 - 45 min	internal method
Curing speed	23 °C 50 % r.h	2 mm/d	-

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

Properties Cured

Curing Conditions: 14 days at 23 °C and 50 % rel. humidity, 2 mm sheet, no post-curing

Property	Condition	Value	Method
Color	-	black	-
Density in water	23 °C	1.33 g/cm ³	DIN EN ISO 1183-1 A
Hardness Shore A	-	30	DIN ISO 48-4
Tensile strength ⁽¹⁾	-	2.0 N/mm ²	ISO 37
Elongation at break ⁽²⁾	-	450 %	ISO 37
Limiting Oxygen Index (LOI), % ⁽³⁾	-	34	-

¹Type 3 / 23°C / 2mm

²Type 3 / 23°C / 2mm

³as per ISO 4589-2:2017

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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

- Appliances Industry
- Automotive Electronics
- Bonding & Sealing

- Formed-In-Place-Gaskets (Wet Type)
- Industrial Assembly
- Machine Building
- Railway Industry

Application details

Multipurpose glue for industrial applications (appliances, automotive, electronics, railway).

Processing

Due to its shear thinning nature ELASTOSIL® N9111 BLACK is easy to apply. The material starts curing upon contact to air humidity.

ELASTOSIL® N9111 BLACK shows primerless adhesion to many substrates, like glass, aluminium, stainless steel, PA and PBT. The cured silicone rubber has excellent flame retardant properties, as proven by fire safety tests according to UL94 and DIN EN 45545-2:2020, requirement set R22, R23 and R24 (test certificate available upon request).

Detailed information about the processing of RTV-1 silicones is given in our brochure "ROOM TEMPERATURE VULCANIZING (RTV) SILICONES - MATERIAL AND PROCESSING GUIDELINES". 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

During vulcanization of ELASTOSIL® N9111 BLACK, a total of 3 % by weight of alcohol is split off. These vapours should not be inhaled for long periods or in high concentration. Work areas should therefore be well ventilated.

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® N9111 BLACK



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

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