

# ELASTOSIL® N 2189



## Moisture Curing Silicone Rubber (RTV-1)

ELASTOSIL® N 2189 is a non-slump, one-part Alkoxy-cure silicone sealant, which cures at room temperature under influence of moisture.

ELASTOSIL® N 2189 shows primerless adhesion to many substrates, in particular to cast magnesium. It exhibits good resistance against mineral oils.

## Properties

- flame retardant (meets UL 94 V-0)
- adhesion on cast magnesium
- Recommended service temperature from -45 °C to 200 °C

## Specific features

- 1-component system
- Flame retardant
- Heat resistant
- Neutral-cure
- Non-slump
- Oil resistant
- One-component

## Technical data

### Properties Uncured

| Property                                | Condition                      | Value                  | Method              |
|---|--------------------------------|------------------------|---------------------|
| Color                                   | -                              | black                  | -                   |
| Density                                 | -                              | 1.20 g/cm <sup>3</sup> | DIN EN ISO 1183-1 A |
| Viscosity, dynamic D = 0.5 1/s          | 25 °C                          | 250000 mPa·s           | DIN EN ISO 3219     |
| Viscosity, dynamic D = 25 1/s           | 25 °C                          | 150000 mPa·s           | DIN EN ISO 3219     |
| Extrusion rate - mass flow (3mm nozzle) | 0.21 N/mm <sup>2</sup>   23 °C | 10 g/10s               | -                   |
| Skin forming time                       | 23 °C   50 % r.h               | 15 min                 | -                   |

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                         | 23 °C     | 1.23 g/cm <sup>3</sup> | DIN EN ISO 1183-1 A |
| Hardness Shore A                | -         | 45                     | DIN ISO 48-4        |
| Tensile strength <sup>(1)</sup> | -         | 1.5 N/mm <sup>2</sup>  | ISO 37              |
| Elongation at break             | -         | 200 %                  | ISO 37              |

<sup>1</sup>Type 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

- Appliances Industry
- Automotive, Aerospace & Railway
- Bonding & Sealing
- Electrical Components
- Formed-In-Place-Gaskets (Wet Type)
- Industrial Assembly

- Ready-to-Use Silicone Sealants - General Applications

## Application details

Multipurpose grade for sealing and bonding in technical applications such as FIPG applications in automotive oil pans

## Processing

ELASTOSIL® N 2189 is a one-part room temperature vulcanizing sealant that cures to a flexible silicone rubber on exposure to moisture. During the curing process a small amount of an alcohol is released. Usually only minor volume shrinkage is observed. After about 15 to 25 min a skin of cured material is formed at the surface. The curing rate strongly depends on temperature and atmospheric humidity in the surrounding

After completion of the vulcanization process the product may be continuously exposed to temperatures as high as 180 °C (356 °F) without damage. 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® N 2189 shows good primerless adhesion to many substrates. We recommend to run 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

ELASTOSIL® N 2189 releases during cure a total 3 % alcohol. These vapors should not be inhaled for long periods or in high concentrations. Hence good ventilation of the works place is necessary.

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® N 2189



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

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