

### **DELO®-GUM 3597**

1C amine-crosslinking silicone rubber, good cutting resistance, self-leveling

#### **Base**

- amine-crosslinking silicone rubber (RTV-1 silicone rubber)
- one-component

#### **Use**

- especially suitable for the elastic and tension-equalizing sealing and bonding of similar and dissimilar materials
- preferably used in electronics, mechanical engineering design
- outstanding properties: amine-crosslinking (alkaline), high temperature resistance, good adhesion to different materials, good cutting resistance, high viscosity, self-leveling, for casting applications
- generally, the product is used in a temperature range of -50 °C up to +180 °C; related to the application, other limits may be more reasonable
- compliant with RoHS directive 2015/863/EU

#### **Processing**

- supplied ready for use and can be processed directly from the bottle or cartridge
- DELO dispensing units are recommendable for efficient product application
- the surfaces to be bonded must be dry as well as free of dust, grease and other contaminations
- use DELOTHEN cleaners for the cleaning of bonding surfaces

#### **Curing**

- cures at room temperature under influence of humidity to a permanently elastic material
- small amounts of an amine bond are decomposed during curing (polycondensation)
- curing starts at the surface of the silicone (contact with the air humidity); a dry skin is formed already after a few minutes
- deep curing of the silicone rubber proceeds with approx. 2 mm / 24 h

#### **Technical data**

<i>Color</i>	milky transparent
Decomposition product	amine
Density [g/cm <sup>3</sup> ] at room temperature (approx. 23 °C)	1.0
<i>Viscosity</i> [mPas] Brookfield at 23 °C	140000
Processing temperature [°C]	5 to 35
<i>Skin formation time</i> [min] at 23 °C / 50 % relative humidity	5

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Deep curing [mm/24 h] at 23 °C / 50 % relative humidity	2
Tensile strength [MPa] according to DIN EN ISO 527	1.6
Elongation at tear [%] according to DIN EN ISO 527	400
Shore hardness A according to DIN EN ISO 868	16
Shrinkage [vol. %] DELO Standard 13	3
Water absorption [weight %] according to DIN EN ISO 62, 24 h at room temperature (approx. 23 °C)	0.23
Dielectric strength [kV/mm] VDE 0303, part 2	15
Dielectric constant VDE 0303, part 4	2.9 - 2.7 (50 - 70 Hz)
Storage life at room temperature (approx. 23 °C) Volume per component $\geq 1$ l, in unopened original container Volume per component $< 1$ l, in unopened original container	6 months 12 months

## **Instructions and advice**

### **General**

The data and information provided are based on tests performed under laboratory conditions. Reliable information about the behavior of the product under practical conditions and its suitability for a specific purpose cannot be concluded from this. It is the customer's responsibility to test the suitability of a product for the intended purpose by considering all specific requirements and by applying standards the customer deems suitable (e. g. DIN 2304-1). Type, physical and chemical properties of the materials to be processed with the product, as well as all actual influences occurring during transport, storage, processing and use, may cause deviations in the behavior of the product compared to its behavior under laboratory conditions. All data provided are typical average values or uniquely determined parameters measured under laboratory conditions. The data and information provided are therefore no guarantee for specific product properties or the suitability of the product for a specific purpose.

Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent.

All products provided by DELO are subject to DELO's General Terms of Business. Verbal ancillary agreements are deemed not to exist.

### **Instructions for use**

The instructions for use of DELO-GUM are available on: [www.DELO.de](http://www.DELO.de). We will be pleased to send them to you on demand.

### **Occupational health and safety**

see material safety data sheet

### **Specification**

The properties in *italics* are part of the specification. Ranges with clear limits are defined for them and others, where applicable. In the course of the QA test, each batch is tested for these properties and the maintenance of the limits is ensured. The measuring methods used can deviate from those specified in the data sheet. Details can be found in the QA test report.