

DELO-GUM® 3697

1C acetic-acid-crosslinking silicone rubber, high adherence, self-leveling

Base

- acetic-acid-crosslinking silicone rubber (RTV-1 silicone rubber)
- one-component, solvent-free

Use

- especially suitable for the elastic and tension-equalizing sealing and bonding of similar and dissimilar materials
- preferably used in mechanical engineering design
- outstanding properties: high temperature resistance, very good adhesion to different materials, very high tensile strength, fast curing, 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 2011/65/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
- a small amount of acetic acid is 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	acetic acid
Density [g/cm ³] at room temperature (approx. 23 °C)	1.1
<i>Viscosity</i> [mPas] Brookfield at 23 °C	350000
Processing temperature [°C]	5 to 35
<i>Skin formation time</i> [min] at 23 °C / 50 % relative humidity	10 to 20

Deep curing [mm/24 h] at 23 °C / 50 % relative humidity	2
Tensile strength [MPa] DIN EN ISO 527	5
Elongation at tear [%] DIN EN ISO 527	500
Shore hardness A DIN EN ISO 868	28
Shrinkage [vol. %] DELO Standard 13	3
Water absorption [weight %] DIN EN ISO 62, 24 h at room temperature (approx. 23 °C)	0.06
Specific volume resistance [Ωcm] VDE 0303, part 3	$>1 \times 10^{13}$
Dielectric strength [kV/mm] VDE 0303, part 2	21
Dielectric constant VDE 0303, part 4	3.1 - 3.0 (50 - 70 Hz)
Creep resistance CTI VDE 0303, part 1, IEC 112	600 M
Storage life at room temperature (max. 25 °C) in unopened original container up to 310 ml	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.

Many product properties are subject to temperature and may change permanently, especially at high temperatures.

It is the user's responsibility to test the suitability of the product for the intended purpose and temperature range of use by considering all specific requirements. Type and 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. Verbal ancillary agreements are deemed not to exist.

Instructions for use

The instructions for use of DELO-GUM are available on: 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.