

DELO®-GUM SI480

1C oxime-crosslinking silicone rubber, for electronic applications, low-viscous

Base

- oxime-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 electronics, mechanical engineering design
- outstanding properties: neutrally crosslinking, no corrosion effect of the decomposition product, optimal for the use in microelectronics, high temperature resistance, good adhesion to different materials, low viscosity, optimal flow behavior 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 oxime 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	oxime
Density [g/cm ³] at room temperature (approx. 23 °C)	1.0
<i>Viscosity</i> [mPas] Brookfield at 23 °C	17000
Processing temperature [°C]	5 to 35
Skin formation time [min] at 23 °C / 50 % relative humidity	10 to 20

DELO Industrial Adhesives
DELO-Allee 1
86949 Windach · Germany
Phone +49 8193 9900-0
Fax +49 8193 9900-144
info@DELO.de · www.DELO.de

Deep curing [mm/24 h] at 23 °C / 50 % relative humidity	2
Tensile strength [MPa] DIN EN ISO 527	0.2
Elongation at tear [%] DIN EN ISO 527	95
Shore hardness A DIN EN ISO 868	16
Shrinkage [vol. %] DELO Standard 13	5
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	$>1 \times 10^{13}$
Surface resistance [Ω] VDE 0303, part 3	$>1 \times 10^{12}$
Dielectric strength [kV/mm] VDE 0303, part 2	19
Dielectric constant VDE 0303, part 4, 1 MHz	2.42
Creep resistance CTI VDE 0303, part 1, IEC 112	600 M
Storage life at room temperature (approx. 23 °C) in unopened original container up to 310 ml	6 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. 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.