

DELO-PUR 9694

polyurethane | 2C | room-temperature-curing

pasty, filled | flow-resistant, suitable for DELO-AUTOMIX

Special features of product

- compliant with RoHS Directive 2015/863/EU
- passes ANSI/UL 94 HB Flame Test
- Component B is humidity-sensitive

Typical area of use

- -40 - 125 °C
- glass/metal bondings
- mixed bondings with plastics

Curing

Curing time

<i>until initial strength at rt approx. +23 °C tensile shear strength 1 - 2 MPa</i>	2	h
<i>until functional strength at rt approx. +23 °C tensile shear strength > 10 MPa</i>	8	h
<i>until final strength at rt approx. +23 °C</i>	72	h
<i>until functional strength at +80 °C tensile shear strength > 10 MPa</i>	30	min

Processing

Mixing ratio A : B - volume	1 : 1	
Mixing ratio A : B - weight	1 : 1	
Processing time after mixing		
<i>in 100 g batch at rt approx. +23 °C</i>	7	min
Storage life in unopened original container		
<i>at +15 °C to +30 °C</i>	6	month(s)

Technical properties

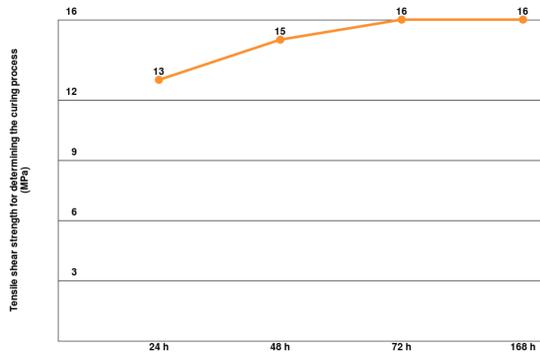
Color in uncured condition	black	
Filler particle type	minerals	
Density of component A	1.47	g/cm ³
Density of component B	1.43	g/cm ³

Parameters

Tensile shear strength <i>Based on DIN EN 1465 Al Al Pretreatment: sand-blasted at approx. +23 °C 7 d Measuring temperature: 100 °C</i>	4	MPa
Tensile shear strength <i>Based on DIN EN 1465 Al Al Pretreatment: sand-blasted at approx. +23 °C 72 h</i>	16	MPa
Compression shear strength <i>DELO Standard 5 PMMA PMMA at approx. +23 °C 7 d</i>	12	MPa
Compression shear strength <i>DELO Standard 5 PETP PETP at approx. +23 °C 7 d</i>	15	MPa
Compression shear strength <i>DELO Standard 5 PC PC at approx. +23 °C 7 d</i>	18	MPa
Compression shear strength <i>DELO Standard 5 PBT PBT at approx. +23 °C 7 d</i>	14	MPa
Compression shear strength <i>DELO Standard 5 PA6 PA6 Pretreatment: Annealing at approx. +23 °C 7 d</i>	11	MPa
Compression shear strength <i>DELO Standard 5 FR4 FR4 Pretreatment: Annealing at approx. +23 °C 7 d</i>	26	MPa
Compression shear strength <i>DELO Standard 5 CFRP CFRP at approx. +23 °C 7 d</i>	19	MPa
Compression shear strength <i>DELO Standard 5 ABS ABS at approx. +23 °C 7 d</i>	8	MPa
Peel resistance <i>DELO Standard 38 Steel Steel Pretreatment: sand-blasted at approx. +23 °C 7 d</i>	8	N/mm

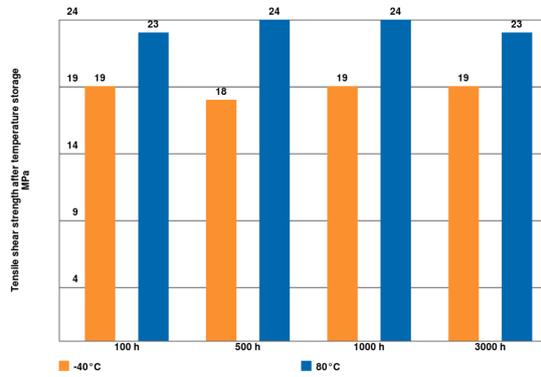
Tensile strength <i>Based on DIN EN ISO 527 at approx. +23 °C 7 d</i>	10	MPa
Elongation at tear <i>Based on DIN EN ISO 527 at approx. +23 °C 7 d</i>	75	%
Young's modulus <i>Based on DIN EN ISO 527 at approx. +23 °C 7 d</i>	100	MPa
Shore hardness A <i>Based on DIN EN ISO 868 at approx. +23 °C 7 d</i>	90	
Shore hardness D <i>Based on DIN EN ISO 868 at approx. +23 °C 7 d</i>	50	
Glass transition temperature <i>DELO Standard 24 Rheometer</i>	40	°C
Coefficient of linear expansion <i>DELO Standard 26 TMA Evaluation T: 30 °C - 140 °C</i>	167	ppm/K
Shrinkage <i>DELO Standard 13</i>	5	vol. %
Water absorption <i>Based on DIN EN ISO 62 Type of storage: Desiccator Duration: 72 h</i>	0.3	wt. %
Decomposition temperature <i>DELO Standard 36</i>	183	°C
Volume resistivity <i>Based on VDE 0303-30</i>	>1xE+12	Ohm·cm
Surface resistance <i>Based on VDE 0303-30</i>	>1xE+13	Ohm
Dielectric strength <i>Based on DIN EN 60243-1</i>	17.7	kV/mm
Comparative tracking index M <i>Based on DIN IEC 60112</i>	600	

Substrates: Al/Al, based on DIN EN 1465



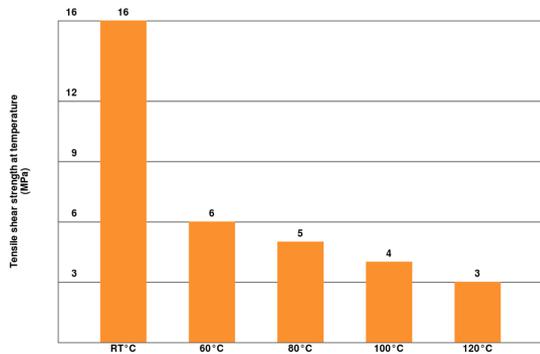
at roomtemperature (approx. 23°C)

Tensile shear strength after temperature storage / based on DIN EN 1465



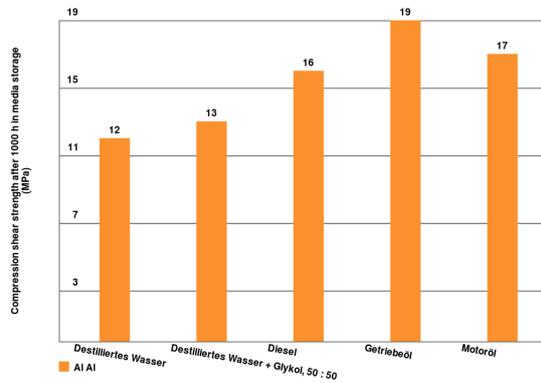
Substrates: Al / Al

Tensile shear strength measured at stated temperatures

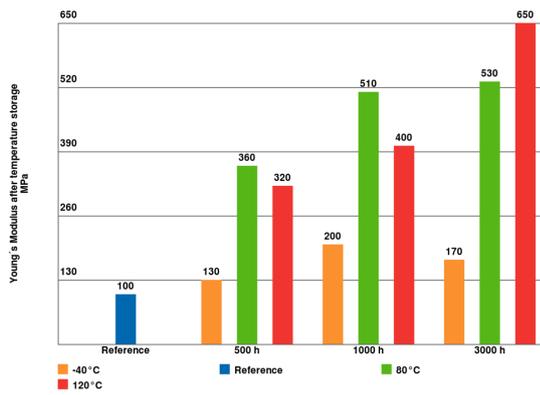


Substrates: Al / Al

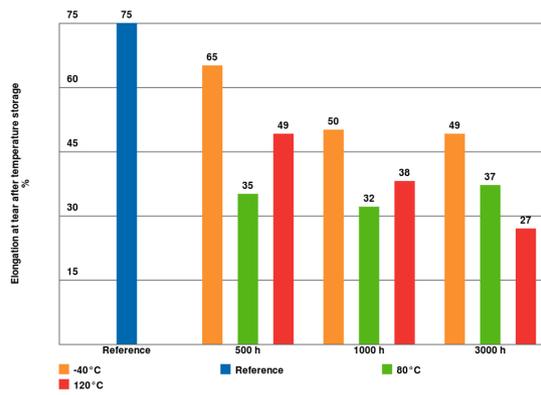
Media resistance after 1000 h



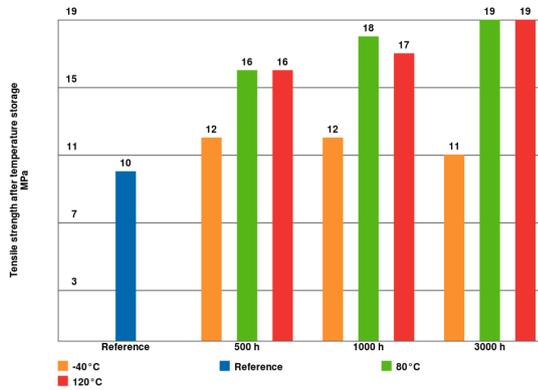
Young's Modulus after temperature storage / based on DIN EN ISO 527



Elongation at tear after temperature storage / based on DIN EN ISO 527



Tensile strength after temperature storage / based on DIN EN ISO 527



Converting table

°F	= (°C x 1.8) + 32	1 MPa	= 145.04 psi
1 inch	= 25.4 mm	1 GPa	= 145.04 ksi
1 mil	= 25.4 µm	1 cP	= 1 mPa·s
1 oz	= 28.3495 g	1 N	= 0.225 lb

General curing and processing information

The curing time stated in the technical data was determined in the laboratory. It can vary depending on the adhesive quantity and component geometry and is therefore a reference value. Unless otherwise specified, the values were measured after 168 h at approx. 23 °C / 50 % r. h., and the values of heat-cured samples were measured after 24 h at approx. 23 °C / 50 % r. h.

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.

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The instructions for use are available on www.DELO-adhesives.com.

We will be pleased to send them to you on demand.

Occupational health and safety

See material safety data sheet.

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CONTACT