

# DELO-DUOPOX<sup>®</sup> SJ8665

**modified epoxy resin | 2C | room-temperature-curing**

filled, high-strength | very good temperature resistance, suitable for side-by-side cartridges, flow-resistant

### Special features of product

- compliant with limits of VOC content in adhesive acc. to GB33372-2020

### Function

- structural adhesive
- electronic adhesive

### Typical area of use

- 40 - 180 °C
- metal bondings

### Curing

Curing time

until initial strength at rt approx. +23 °C tensile shear strength 1 - 2 MPa	3.5	h
until functional strength at rt approx. +23 °C tensile shear strength > 10 MPa	5	h
until final strength at rt approx. +23 °C	7	d
until initial strength at +80 °C tensile shear strength 1 - 2 MPa	5	min
until functional strength at +80 °C tensile shear strength > 10 MPa	10	min
until final strength at +80 °C	60	min

### Processing

Mixing ratio A : B - volume	2 : 1
Mixing ratio A : B - weight	1.65 : 1

Processing time after mixing

<i>in 20 g batch at rt approx. +23 °C</i>	15	min
<i>in 100 g batch at rt approx. +23 °C</i>	40	min

Storage life in unopened original container

<i>up to &lt;= 1 l at +18 °C to +25 °C</i>	12	month(s)
<i>at +18 °C to +25 °C</i>	9	month(s)

**Technical properties**

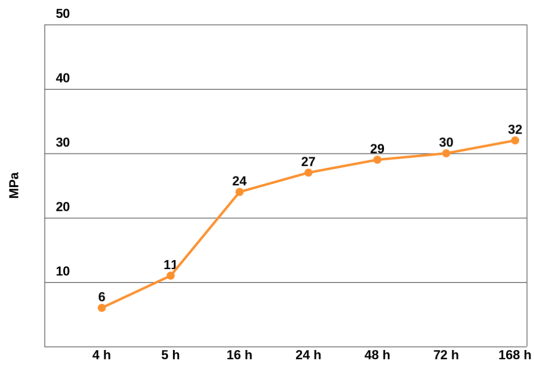
Color in cured condition in 1 mm layer thickness	black
Filler particle type	minerals

**Parameters**

Density <i>Component A   liquid</i>	1.16	g/cm <sup>3</sup>
Density <i>Component B   liquid</i>	1.41	g/cm <sup>3</sup>
Viscosity <i>Component A   liquid   Rheometer   Shear rate: 2 1/s   Gap: 500 µm</i>	300000	mPa·s
Viscosity <i>Component B   liquid   Rheometer   Shear rate: 2 1/s   Gap: 500 µm</i>	30000	mPa·s
Tensile shear strength <i>by the criteria of DIN EN 1465   <b>AI   AI</b>   Pretreatment: sand-blasted   at approx. +23 °C   168 h</i>	32	MPa
Tensile shear strength <i>by the criteria of DIN EN 1465   <b>Steel   Steel</b>   Pretreatment: sand-blasted   at approx. +23 °C   7 d</i>	24	MPa
Compression shear strength <i>DELO Standard 5   <b>AI   AI</b>   Pretreatment: sand-blasted   at approx. +23 °C   7 d</i>	30	MPa
Compression shear strength <i>DELO Standard 5   <b>AI   AI</b>   Pretreatment: sand-blasted   80 °C   1 h</i>	50	MPa
Tensile strength <i>by the criteria of DIN EN ISO 527   at approx. +23 °C   7 d</i>	46	MPa

Tensile strength <i>by the criteria of DIN EN ISO 527   80 °C   1 h</i>	57	MPa
Elongation at tear <i>by the criteria of DIN EN ISO 527   at approx. +23 °C   7 d</i>	3.5	%
Elongation at tear <i>by the criteria of DIN EN ISO 527   80 °C   1 h</i>	5.5	%
Young's modulus <i>by the criteria of DIN EN ISO 527   at approx. +23 °C   7 d</i>	3300	MPa
Young's modulus <i>by the criteria of DIN EN ISO 527   80 °C   1 h</i>	2800	MPa
Shore hardness D <i>by the criteria of DIN EN ISO 868   at approx. +23 °C   7 d</i>	77	
Shore hardness D <i>by the criteria of DIN EN ISO 868   80 °C   1 h</i>	82	
Glass transition temperature <i>DMTA   at approx. +23 °C   7 d</i>	126	°C
Coefficient of linear expansion <i>DELO Standard 26   TMA   Evaluation T: 35 °C - 100 °C   at approx. +23 °C   7 d</i>	82	ppm/K
Coefficient of linear expansion <i>DELO Standard 26   TMA   Evaluation T: 120 °C - 175 °C   at approx. +23 °C   7 d</i>	171	ppm/K
Shrinkage <i>DELO Standard 13   at approx. +23 °C   7 d</i>	3	vol. %
Shrinkage <i>DELO Standard 13   80 °C   1 h</i>	3	vol. %
Water absorption <i>by the criteria of DIN EN ISO 62   Layer thickness: 4 mm   at approx. +23 °C   168 h   Type of storage: Media   Medium: Distilled water   Storage temperature: at approx. +23 °C   Duration: 24 h</i>	0.15	wt. %
Decomposition temperature <i>DELO Standard 36   at approx. +23 °C   7 d</i>	294	°C

Tensile shear strength for determining the curing process  
Substrates: Al/Al, by the criteria of DIN EN 1465

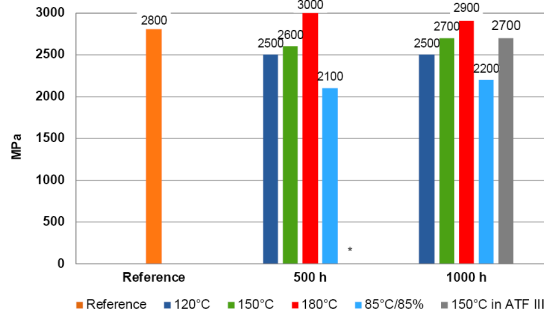


at room temperature (approx. +23 °C)

Tensile shear strength for determining the curing process at temperature  
Substrates: Al/Al, curing: 80 °C, by the criteria of DIN EN 1465

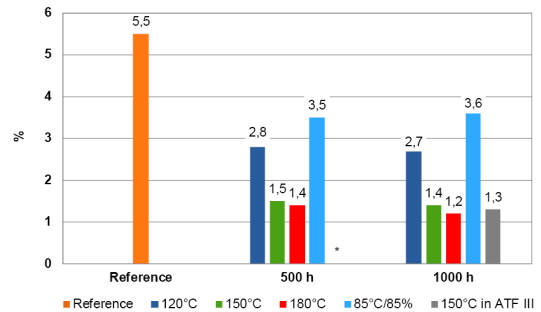


Young's Modulus after temperature storage / based on DIN EN ISO 527  
curing: 1h at +80°C



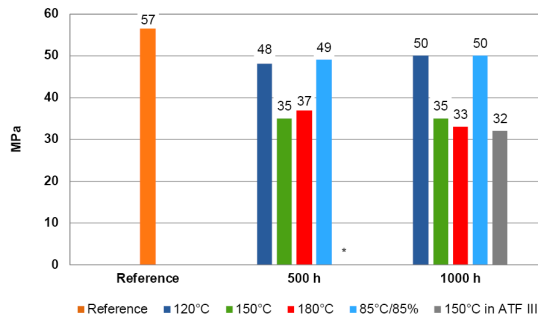
\* No value measured

Elongation at tear after temperature storage / based on DIN EN ISO 527  
curing: 1h at +80°C



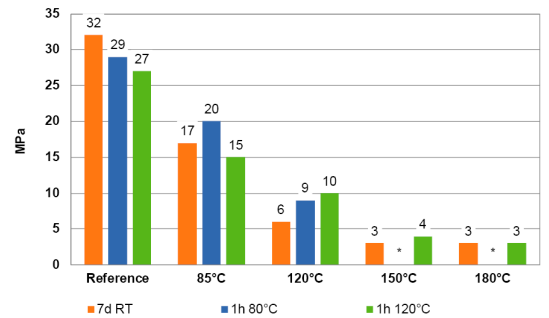
\* No value measured

Tensile strength after temperature storage / based on DIN EN ISO 527  
curing: 1h at +80°C



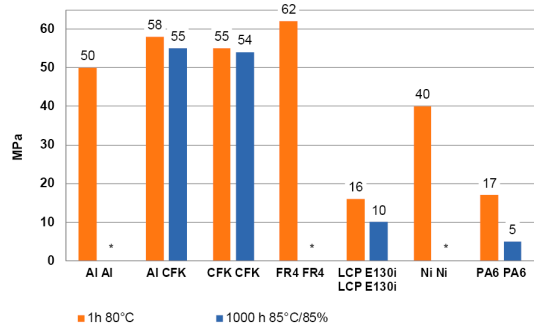
\* No value measured

Tensile shear strength at temperature / based on DIN EN 1465



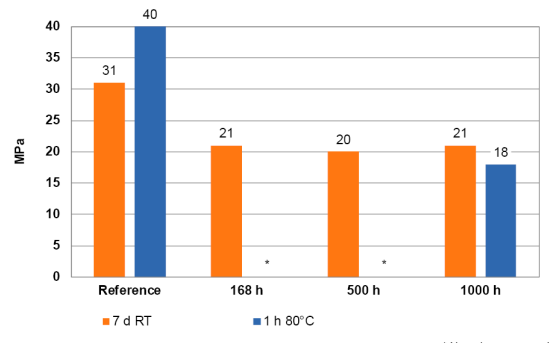
\* No value measured

Compression shear strength on different substrates / based on DELO standard 5  
curing: 1h at +80°C



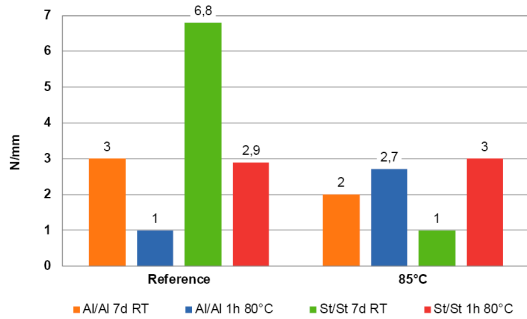
\* No value measured

Compression shear strength on Ni after 85 °C / 85 % r.h. storage

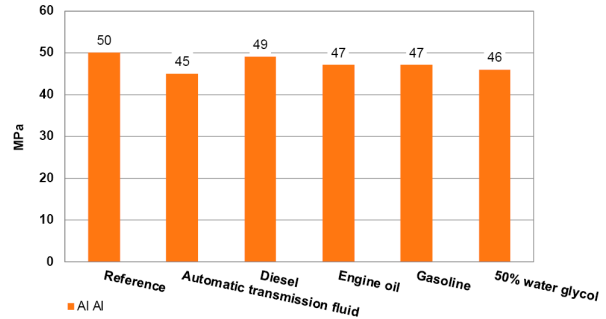


\* No value measured

Floating roller peel resistance / based on DELO standard 38



Compression shear strength after media storage for 1000 h / by the criteria of DELO Standard 5  
Curing: 1 h at +80°C



### 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. Curing can be supported or accelerated by heat input. Additional heat input can change the physical properties of the product. Values measured after 24 h at approx. 23 °C / 50 % r.h., unless otherwise specified.

### 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

You can find further details in the instructions for use.  
The instructions for use are available on [www.DELO-adhesives.com](http://www.DELO-adhesives.com).  
We will be pleased to send them to you on demand.

### Occupational health and safety

See material safety data sheet.

### Specification

Nothing contained in this Technical Datasheet shall be interpreted as any express warranty or guarantee. This Technical Datasheet is for reference only and does not constitute a product specification. Please ask our responsible Sales Engineer for the applicable product specification which includes defined ranges. DELO is neither liable for any values and content of this Technical Datasheet nor for oral or written recommendations regarding the use, unless otherwise agreed in writing. This limitation of liability is not applicable for damages resulting from intent, gross negligence or culpable breach of cardinal obligations, nor shall it apply in case of death or personal injury or in case of liability under any applicable compulsory law.

## CONTACT