

DELO-DUOPOX[®] SJ8668

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

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

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	h
until functional strength at rt approx. +23 °C tensile shear strength > 10 MPa	4	h
until final strength at rt approx. +23 °C	168	h
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	1.7 : 1
Processing time after mixing	
in 100 g batch at rt approx. +23 °C	40 min
Storage life in unopened original container	
at +18 °C to +25 °C	9 month(s)

Technical properties

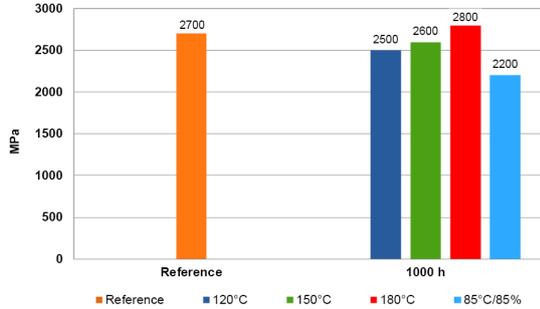
Color in cured condition in 1 mm layer thickness	black
Transparency in cured condition in 1 mm layer thickness	opaque
Filler particle type	minerals

Parameters

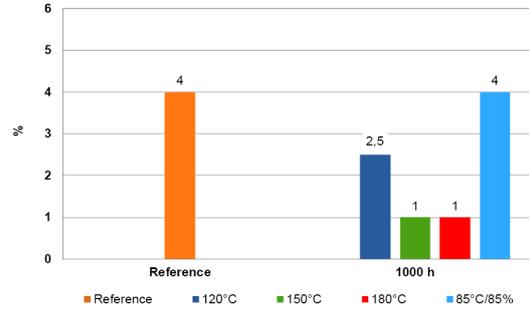
Density <i>Component A by the criteria of DIN 66137-2 liquid</i>	1.16	g/cm ³
Density <i>Component B by the criteria of DIN 66137-2 liquid</i>	1.35	g/cm ³
Viscosity <i>Component A liquid Rheometer Shear rate: 2 1/s Gap: 500 µm</i>	250000	mPa·s
Viscosity <i>Component B liquid Rheometer Shear rate: 2 1/s Gap: 500 µm</i>	80000	mPa·s
Tensile shear strength <i>by the criteria of DIN EN 1465 AI AI Pretreatment: sand-blasted at approx. +23 °C 168 h</i>	32	MPa
Tensile shear strength <i>by the criteria of DIN EN 1465 Steel Steel Pretreatment: sand-blasted at approx. +23 °C 168 h</i>	24	MPa
Compression shear strength <i>DELO Standard 5 AI AI Pretreatment: sand-blasted at approx. +23 °C 168 h</i>	38	MPa
Compression shear strength <i>DELO Standard 5 AI AI Pretreatment: sand-blasted 80 °C 60 min</i>	50	MPa
Peel resistance <i>DELO Standard 38 AI AI Pretreatment: sand-blasted at approx. +23 °C 168 h</i>	2	N/mm
Peel resistance <i>DELO Standard 38 Steel Steel Pretreatment: sand-blasted at approx. +23 °C 168 h</i>	3	N/mm
Tensile strength <i>by the criteria of DIN EN ISO 527 at approx. +23 °C 168 h</i>	43	MPa
Elongation at tear <i>by the criteria of DIN EN ISO 527 at approx. +23 °C 168 h</i>	4	%
Young's modulus <i>by the criteria of DIN EN ISO 527 at approx. +23 °C 168 h</i>	3300	MPa

Shore hardness D <i>by the criteria of DIN EN ISO 868 at approx. +23 °C 168 h</i>	80	
Glass transition temperature <i>DMTA at approx. +23 °C 168 h</i>	135	°C
Coefficient of linear expansion <i>DELO Standard 26 TMA Evaluation T: -40 - 20 80 °C 15 min</i>	58	ppm/K
Coefficient of linear expansion <i>DELO Standard 26 TMA Evaluation T: 120 - 180 80 °C 15 min</i>	184	ppm/K
Shrinkage <i>DELO Standard 13 at approx. +23 °C 168 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 Duration: 24 h</i>	0.17	wt. %
Decomposition temperature <i>DELO Standard 36 at approx. +23 °C 168 h</i>	291	°C

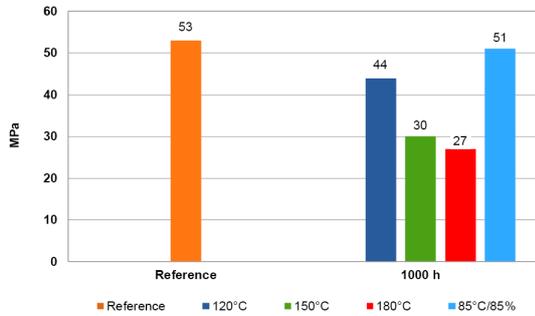
Young's Modulus after temperature storage, by the criteria of DIN EN ISO 527
Curing: 1h +80°C



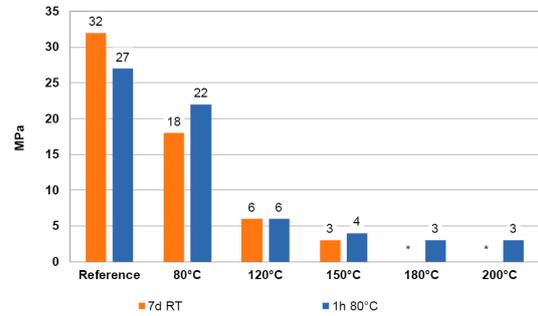
Elongation at tear after temperature storage, by the criteria of DIN EN ISO 527
Curing: 1h +80°C



Tensile strength after temperature storage, by the criteria of DIN EN ISO 527
Curing: 1h +80°C

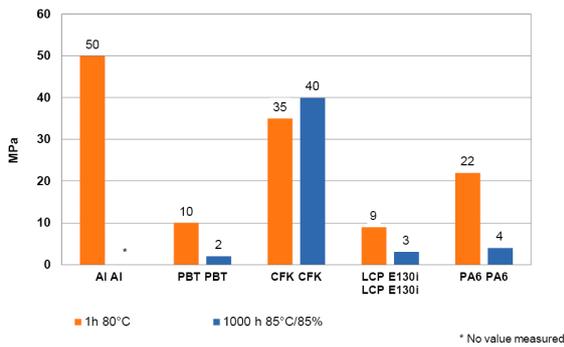


Tensile shear strength measured at the stated temperatures
Substrates: Al/Al, by the criteria of DIN EN 1465



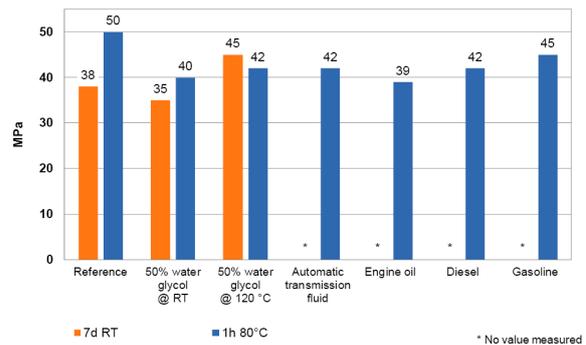
* No value measured

Compression shear strength on different substrates, DELO Standard 5
curing: 1h +80°C



* No value measured

Compression shear strength after media storage for 1000 h, DELO Standard 5



* No value measured

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.

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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.

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

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ADHESIVES

DISPENSING

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