DELO-DUOPOX® AB8162

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

suitable for side-by-side cartridges, filled, thixotropic, high-strength

Special features of product

- compliant with RoHS Directive 2015/863/EU
- CS/FAR Part 25 §25.853(a)(1)(ii) Amdt. 15/ Amdt. 25-116 & ABD0031 (Resistance of Material to Flame, 12s Vertical Bunsen Burner Test);
- CS/FAR Part 25 §25.853(d) Amdt. 15/ Amdt. 25-116 & ABD0031 (Specific Optical Density of Smoke);
- ABD0031 (Toxic Components on Combustion Products)

Function

- construction adhesive

Typical area of use

- bondings in aircraft interiors

Curing

Curing time

until initial strength *at rt approx. +23 °C* *tensile shear strength 1 - 2 MPa*	2.25	h
until functional strength *at rt approx. +23 °C* *tensile shear strength > 10 MPa*	3.5	h
until final strength *at rt approx. +23 °C*	168	h

Processing

Mixing ratio A : B - volume	2 : 1
Mixing ratio A : B - weight	2.12 : 1

Processing time after mixing		
in 50 g batch *at rt approx. +23 °C* *DELO Standard 52*	10	min
in 20 g batch *at rt approx. +23 °C* *DELO Standard 51*	18	min
Storage life in unopened original container		
up to <= 1 l *at +18 °C to +25 °C*	9	month(s)
from > 1 l *at +18 °C to +25 °C*	12	month(s)

Technical properties

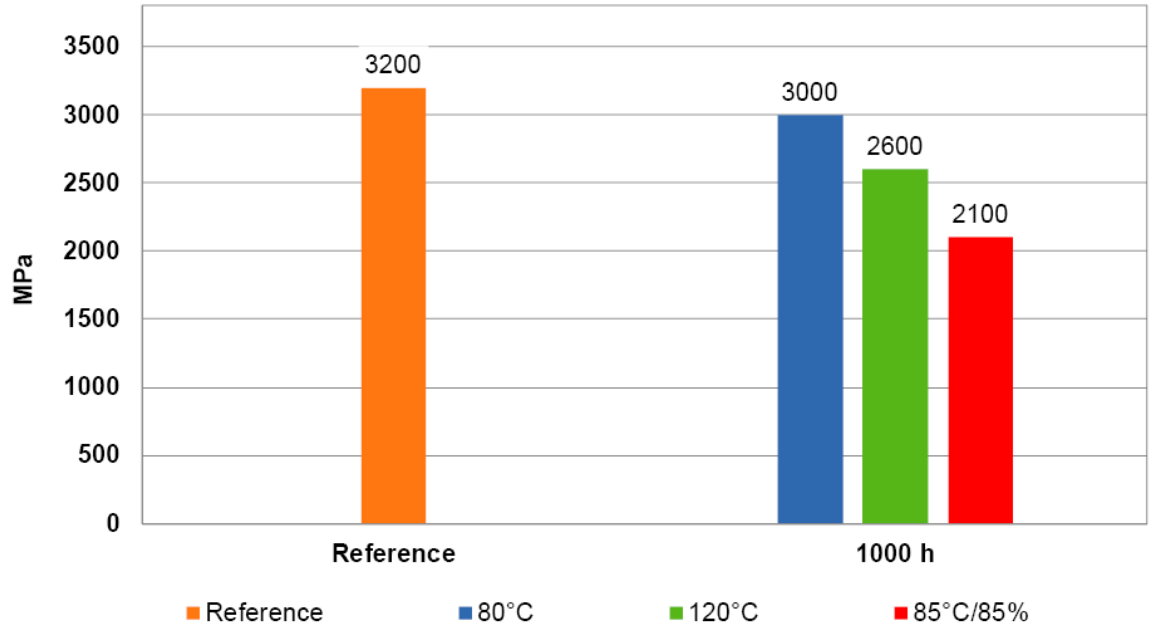
Color in cured condition in 1 mm layer thickness	beige
Transparency in cured condition in 1 mm layer thickness	opaque
Filler particle type	organic

Parameters

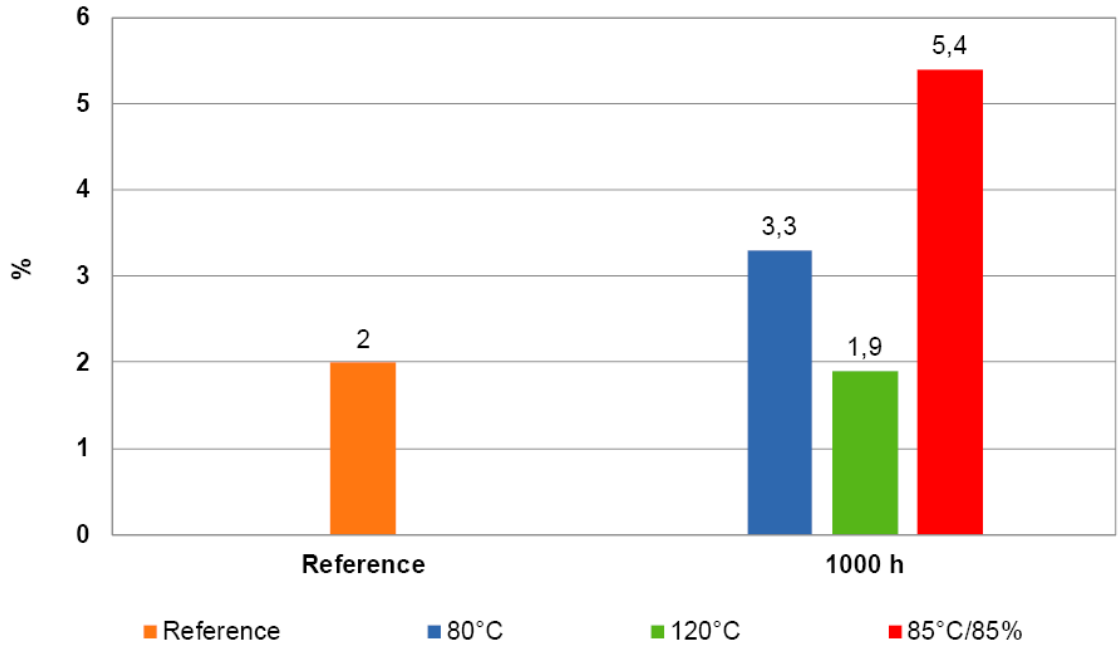
Density *Component A | liquid*	1.27	g/cm³
Density *Component B | liquid*	1.21	g/cm³
Viscosity *liquid | Rheometer | Shear rate: 2 1/s | Gap: 200 µm*	62.000	mPa·s
Viscosity *Component A | liquid | Rheometer | Shear rate: 2 1/s | Gap: 200 µm*	120000	mPa·s
Viscosity *Component B | liquid | Rheometer | Shear rate: 2 1/s | Gap: 200 µm*	30000	mPa·s
Tensile shear strength *by the criteria of DIN EN 1465 | **Al** | **Al** | Pretreatment: sand-blasted | at approx. +23 °C | 168 h*	24	MPa
Tensile shear strength *by the criteria of DIN EN 1465 | **Al** | **Al** | Pretreatment: sand-blasted | at approx. +23 °C | 168 h | Measuring temperature: 85 °C*	6	MPa

Tensile shear strength *by the criteria of DIN EN 1465	**Al**	**Al**	*Pretreatment: sand-blasted	60 °C	2 h*	25	MPa
Tensile shear strength *by the criteria of DIN EN 1465	**Al**	**Al**	*Pretreatment: sand-blasted	60 °C	2 h	Measuring temperature: 85 °C*	8	MPa
Compression shear strength *DELO Standard 5	**Al**	**Al**	at approx. +23 °C	168 h*	14	MPa
Compression shear strength *DELO Standard 5	**Al**	**Al**	Pretreatment: sand-blasted	at approx. +23 °C	168 h*	40	MPa
Compression shear strength *DELO Standard 5	**PA6**	**PA6**	Pretreatment: Annealing	at approx. +23 °C	168 h*	20	MPa
Peel resistance *by the criteria of DIN EN 2243-2	**Al**	**Al**	*Pretreatment: sand-blasted	at approx. +23 °C	168 h*	3.5	N/mm
Peel resistance *DELO Standard 38	**Steel**	**Steel**	*Pretreatment: sand-blasted	at approx. +23 °C	168 h*	6	N/mm
Tensile strength *by the criteria of DIN EN ISO 527	at approx. +23 °C	168 h*	36	MPa
Elongation at tear *by the criteria of DIN EN ISO 527	at approx. +23 °C	168 h*	2	%
Young's modulus *by the criteria of DIN EN ISO 527	at approx. +23 °C	168 h*	3200	MPa
Shore hardness D *by the criteria of DIN EN ISO 868	at approx. +23 °C	168 h*	77	
Glass transition temperature *DMTA	at approx. +23 °C	168 h*	117	°C
Shrinkage *DELO Standard 13	at approx. +23 °C	168 h*	3	vol. %
Water absorption *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*	0.13	wt. %
Decomposition temperature *DELO Standard 36	at approx. +23 °C	168 h*	264	°C

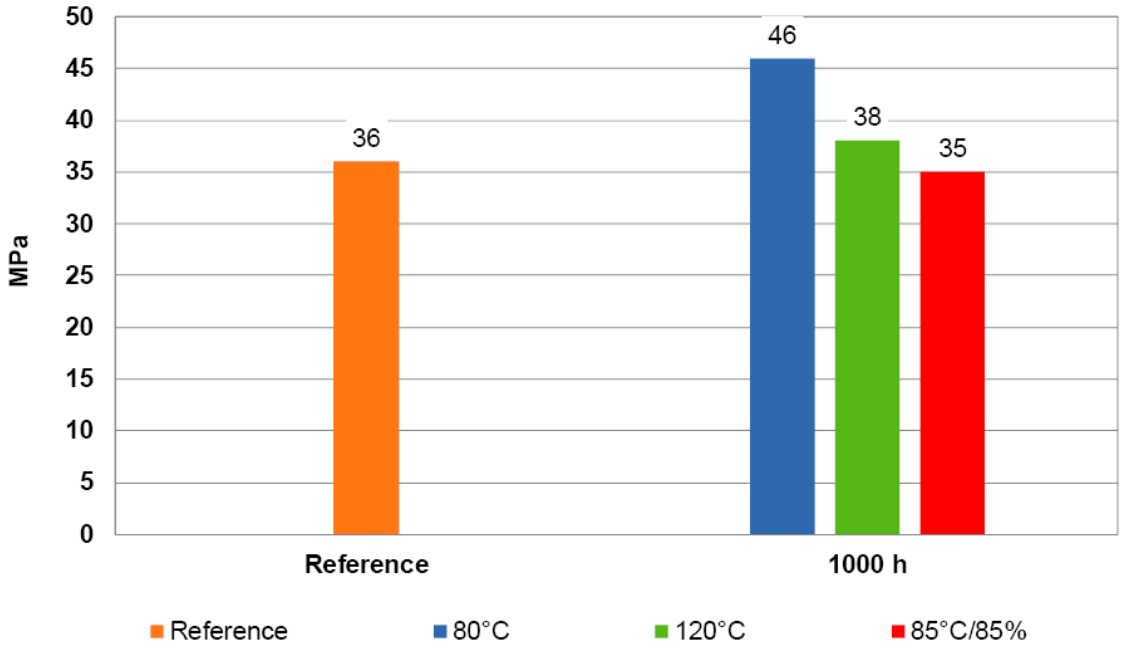
Young's Modulus after temperature storage / based on DIN EN ISO 527



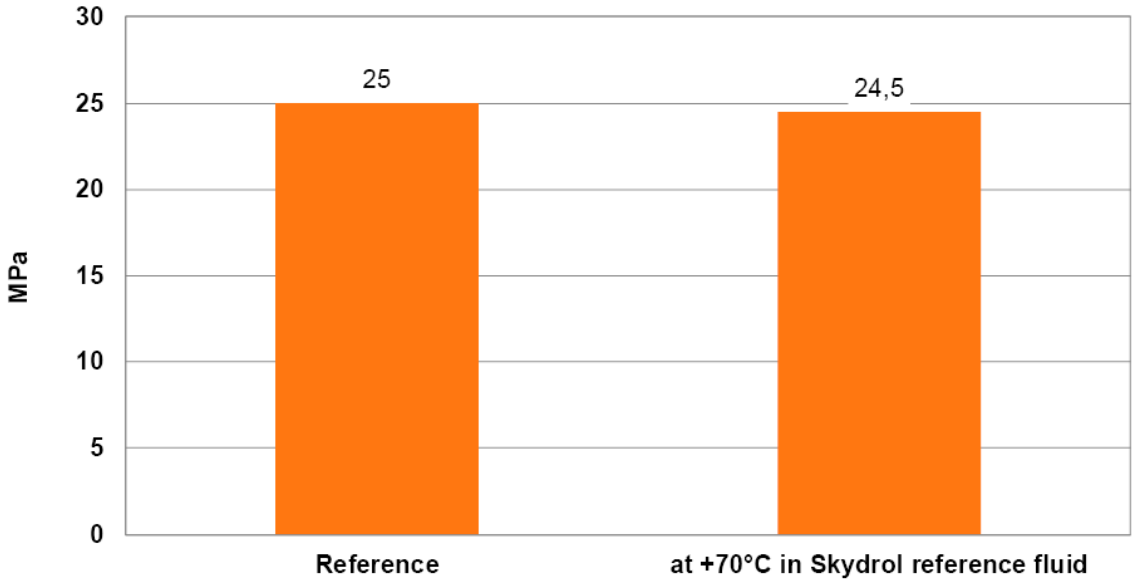
Elongation at tear after temperature storage, by the criteria of DIN EN ISO 527



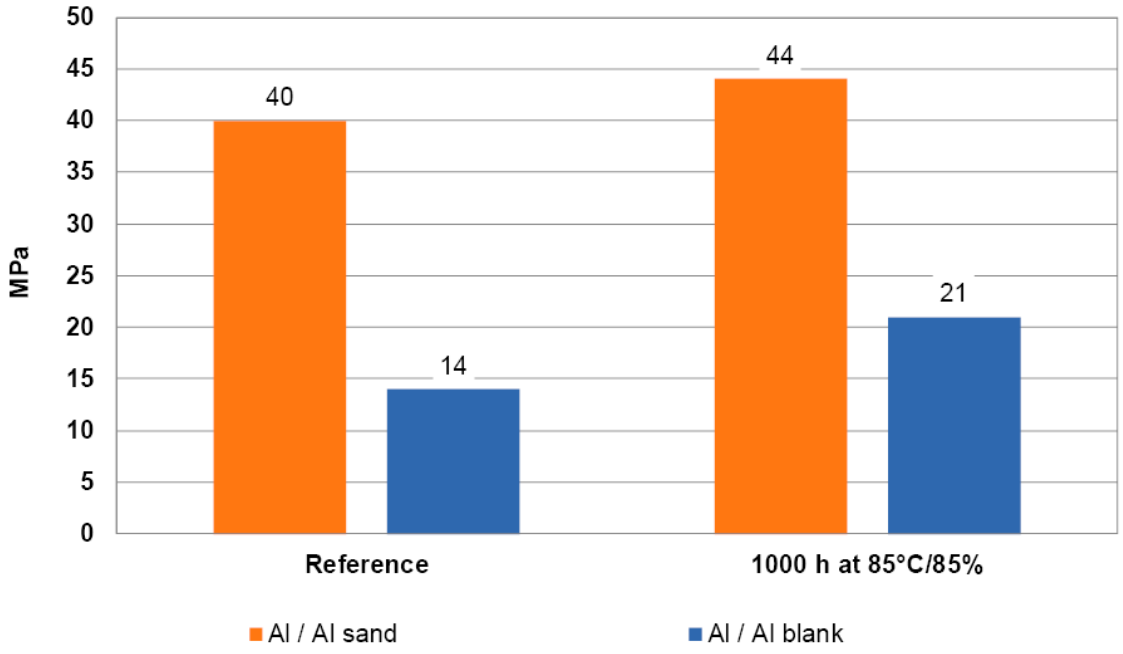
Tensile strength after temperature storage, by the criteria of DIN EN ISO 527



Tensile shear strength after media storage for 500 h



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



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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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.

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