

DELO[®] PHOTOBOND[®] 4497

modified acrylate | 1C | UV- / VIS-curing

free of solvents | thixotropic, filled | surface-dry

Special features of product

- compliant with RoHS Directive 2015/863/EU
- halogen-free according to IEC 61249-2-21

Typical area of use

- -40 - 120 °C

Curing

Suitable lamp types	LED 365 nm, LED 400 nm, UVA	
Typical irradiation time		
<i>intensity 55 - 60 mW/cm² UVA</i>	15	s
<i>intensity 200 mW/cm² LED 400 nm</i>	8	s

Processing

Conditioning time (typical)		
<i>when stored in cold conditions in containers up to 50 ml</i>	30	min
<i>when stored in cold conditions in containers up to 1,000 ml</i>	4	h
Processing time		
<i>tumble before processing for 3 h 1 – 2 1/min conditioned containers in containers up to 1,000 ml</i>	3	d
Storage life in unopened original container		
<i>at 0 °C to +25 °C</i>	6	month(s)

Technical properties

Color in uncured condition	whitish
Transparency	translucent

Color in cured condition in 0.1 mm layer thickness	whitish
Color in cured condition in 1 mm layer thickness	whitish

Parameters

Density	1.1	g/cm ³
Viscosity <i>Based on DIN EN 12092 Viscosimeter</i>	30000	mPa·s
Compression shear strength <i>DELO Standard 5 PC Al 60 mW/cm² 60 s</i>	4	MPa
Compression shear strength <i>DELO Standard 5 PC PC 60 mW/cm² 60 s</i>	12	MPa
Compression shear strength <i>DELO Standard 5 PC Glass 60 mW/cm² 60 s</i>	10	MPa
Compression shear strength <i>DELO Standard 5 PMMA Glass 60 mW/cm² 60 s</i>	3	MPa
Compression shear strength <i>DELO Standard 5 Glass Glass 60 mW/cm² 60 s</i>	19	MPa
Compression shear strength <i>DELO Standard 5 PMMA PMMA 60 mW/cm² 60 s</i>	7	MPa
Compression shear strength <i>DELO Standard 5 Glass Al 60 mW/cm² 60 s</i>	19	MPa
Tensile strength <i>Based on DIN EN ISO 527 60 mW/cm² 90 s</i>	11	MPa
Elongation at tear <i>Based on DIN EN ISO 527 60 mW/cm² 90 s</i>	200	%
Young's modulus <i>Based on DIN EN ISO 527 60 mW/cm² 90 s</i>	84	MPa
Shore hardness A <i>Based on DIN EN ISO 868 60 mW/cm² 90 s</i>	90	
Shore hardness D <i>Based on DIN EN ISO 868 60 mW/cm² 90 s</i>	40	
Glass transition temperature <i>DELO Standard 24 Rheometer</i>	52	°C

Coefficient of linear expansion 208 ppm/K
TMA | Evaluation T: -

Shrinkage 9 vol. %
DELO Standard 13

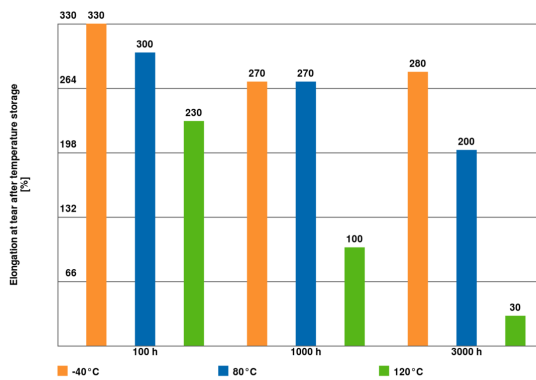
Water absorption 0.9 wt. %
Based on DIN EN ISO 62 | Type of storage: Media | Medium: Distilled water | Storage temperature: at approx. +23 °C

Index of refraction 1.498
Refractometer

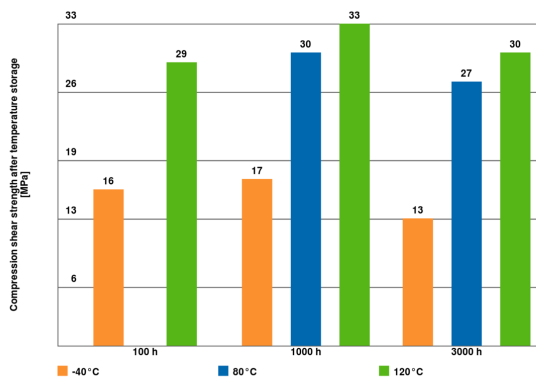
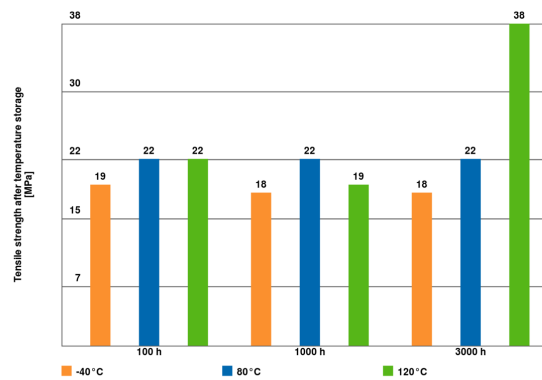
Decomposition temperature 200 °C
DELO Standard 36

Creep resistance CTI 600
Based on VDE 0303-1

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



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



Substrates: Glas / Glas

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.

Increasing or decreasing the curing temperature and / or irradiation intensity and / or irradiation intensity shortens or prolongs the curing time and can lead to changed physical properties.

All curing or light fixation parameters depend on material thickness and absorption, adhesive layer thickness, lamp type and distance between lamp and adhesive layer.

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

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