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# **DELO PHOTOBOND GB368**

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

free of solvents

Curing         Suitable lamp types       LED 365 nm, LED 400 nm, UVA         Recommended irradiation time         intensity 55 - 60 mW/cm*       15 s         Processing       15 s         Adhesive application       needle-dispensable         Storage life in unopened original container       12 month(s)         at 0 °C to +25 °C       12 month(s)         Technical properties       12         Color in uncured condition       colorless         Color in cured condition in 0.1 mm layer thickness       colorless         Color in cured condition in 1 mm layer thickness       colorless         Parameters       1.0 g/cm*         Liquid       5700 mPa·s	<ul> <li>Special features of product</li> <li>compliant with RoHS Directive 2015/863/EU</li> </ul>	<ul> <li>Typical area of use</li> <li>-40 - 120 °C</li> <li>glass/metal bondings</li> </ul>
UVA         Recommended irradiation time         intensity 55 - 60 mW/cm²         UVA         Processing         Adhesive application         Adhesive application         storage life in unopened original container         at 0 °C to +25 °C         Technical properties         Color in uncured condition         color is colorless         Color in cured condition in 0.1 mm layer thickness         color is colorless         Color in cured condition in 1 mm layer thickness         colorless         Color is colorless         Color is 0.1 mm layer thickness         colorless         Color is 0.2 mm layer thickness         colorless         Color is 0.1 mm layer thickness         colorless         Persity         Ugadd         Viscosity       5700	Curing	
intensity 55 - 60 mW/om²       15       s         Processing       needle-dispensable         Adhesive application       needle-dispensable         Storage life in unopened original container       12       month(s)         at 0 °C to +25 °C       12       month(s)         Technical properties       colori nuncured condition       colorless         Color in uncured condition in 0.1 mm layer thickness       colorless       colorless         Color in cured condition in 1 mm layer thickness       colorless          Parameters       1.0       g/cm³         Viscosity       5700       mPa-s	Suitable lamp types	
UVA         Processing         Adhesive application       needle-dispensable         Storage life in unopened original container         at 0 °C to +25 °C       12         Technical properties         Color in uncured condition       colorless         Color in cured condition in 0.1 mm layer thickness       colorless         Color in cured condition in 1 mm layer thickness       colorless         Parameters       1.0       g/cm³         Viscosity       5700       mPa-s	Recommended irradiation time	
Adhesive application       needle-dispensable         Storage life in unopened original container       12         at 0 °C to +25 °C       12         Technical properties       color less         Color in uncured condition       colorless         Color in cured condition in 0.1 mm layer thickness       colorless         Color in cured condition in 1 mm layer thickness       colorless         Parameters       1.0       g/cm³         Viscosity       5700       mPa·s		15 s
Storage life in unopened original container         at 0 °C to +25 °C       12       month(s)         Technical properties         Color in uncured condition       colorless         Color in cured condition in 0.1 mm layer thickness       colorless         Color in cured condition in 1 mm layer thickness       colorless         Parameters       1.0       g/cm³         Viscosity       5700       mPa·s	Processing	
at 0 °C to +25 °C12month(s)Technical propertiesColor in uncured conditioncolorlessColor in cured condition in 0.1 mm layer thicknesscolorlessColor in cured condition in 1 mm layer thicknesscolorlessColor in cured condition in 1 mm layer thicknesscolorlessParametersDensity Liquid1.0Viscosity5700mPa·s	Adhesive application	needle-dispensable
at 0 °C to +25 °C       Technical properties         Color in uncured condition       colorless         Color in cured condition in 0.1 mm layer thickness       colorless         Color in cured condition in 1 mm layer thickness       colorless         Parameters       parameters         Density       1.0       g/cm³         Viscosity       5700       mPa·s	Storage life in unopened original container	
Color in uncured conditioncolorlessColor in cured condition in 0.1 mm layer thicknesscolorlessColor in cured condition in 1 mm layer thicknesscolorlessParameterscolorlessDensity Liquid1.0Viscosity5700mPa·s	at 0 °C to +25 °C	12 month(s)
Color in cured condition in 0.1 mm layer thicknesscolorlessColor in cured condition in 1 mm layer thicknesscolorlessParameters1.0g/cm³Density Liquid1.0g/cm³Viscosity5700mPa·s	Technical properties	
Color in cured condition in 1 mm layer thickness       colorless         Parameters       1.0       g/cm³         Density       1.0       g/cm³         Viscosity       5700       mPa·s	Color in uncured condition	colorless
Parameters       1.0       g/cm³         Density       1.0       g/cm³         Liquid       5700       mPa·s	Color in cured condition in 0.1 mm layer thickness	colorless
Density Liquid 1.0 g/cm³ Viscosity 5700 mPa·s	Color in cured condition in 1 mm layer thickness	colorless
Liquid Viscosity 5700 mPa·s	Parameters	
		1.0 g/cm <sup>3</sup>
	Based on DIN EN 12092   Liquid	



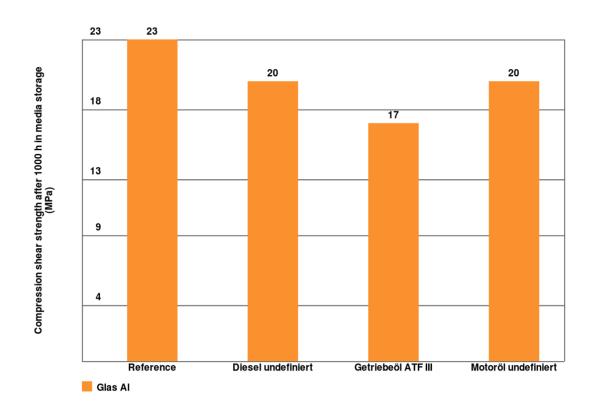
Minimum irradiation time DELO Standard 23   Rheometer   60 mW/cm²	15	S
Compression shear strength DELO Standard 5   Glass   PMMA   60 mW/cm²   60 s	12	MPa
Compression shear strength DELO Standard 5   PC   Al   60 mW/cm²   60 s	8	MPa
Compression shear strength DELO Standard 5   PC   Glass   60 mW/cm²	7	MPa
Compression shear strength DELO Standard 5   PC   PC   60 mW/cm²   60 s	6	MPa
Compression shear strength DELO Standard 5   PMMA   PMMA   60 mW/cm²   60 s	15	MPa
Compression shear strength DELO Standard 5   Glass   Glass   60 mW/cm²   60 s	23	MPa
Compression shear strength DELO Standard 5   Glass   Al   60 mW/cm²   60 s	23	MPa
Compression shear strength DELO Standard 5   Glass   ABS   60 mW/cm²   60 s	17	MPa
Tensile strength Based on DIN EN ISO 527   60 mW/cm²   90 s	20	MPa
Elongation at tear Based on DIN EN ISO 527   60 mW/cm²   90 s   Plus   60 mW/cm²   90 s	17	%
Young's modulus Based on DIN EN ISO 527   60 mW/cm²   90 s   Plus   60 mW/cm²   90 s	900	MPa
Shore hardness D Based on DIN EN ISO 868	67	
Glass transition temperature DELO Standard 24   Rheometer	102	°C
Coefficient of linear expansion TMA	236	ppm/K

## TECHNICAL DATASHEET



Shrinkage DELO Standard 13	7	vol. %	
Water absorption 0.5 Wt. % Based on DIN EN ISO 62   Type of storage: Media   Medium: Distilled water   Temp.: at approx. +23 °C			
Index of refraction Liquid   Refractometer	1.51		
Decomposition temperature DELO Standard 36	233	°C	

#### Media resistance after 1000 h





### **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	1cP =1mPa·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 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 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

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



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