

# DELO<sup>®</sup> KATIOBOND<sup>®</sup> EG6133

**modified epoxy resin | 1C | UV-curing**

free of solvents | low shrinkage

### Special features of product

- compliant with RoHS Directive 2015/863/EU

### Function

- electronic encapsulant
- encapsulant / potting compound

### Typical area of use

- 40 - 160 °C
- pin sealing

### Curing

Suitable lamp types	LED 365 nm, UVA	
Minimum irradiation dose		
<i>LED 365 nm</i>	1400	mW·s/cm <sup>2</sup>
Typical irradiation time		
<i>intensity 200 mW/cm<sup>2</sup> LED 365 nm</i>	30	s
Typical curing time		
<i>at rt approx. + 23 °C irradiated</i>	24	h

### Processing

Processing time		
<i>in standard climate +23 °C / 50 % r. h.</i>	14	d
Storage life in unopened original container		
<i>at 0 °C to +25 °C</i>	9	month(s)

### Technical properties

Color in cured condition in 1 mm layer thickness	blue
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Transparency in cured condition in 1 mm layer thickness transparent

Filler information unfilled

**Parameters**

Density 1.1 g/cm<sup>3</sup>  
*by the criteria of DIN EN ISO 2811-3 | liquid*

Viscosity 4300 mPa·s  
*liquid | Rheometer | Shear rate: 10 1/s*

Maximum curable layer thickness ≥ 4 mm  
*DELO Standard 20 | **White substrate** | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Maximum curable layer thickness ≥ 4 mm  
*DELO Standard 20 | **White substrate** | 365 nm | 1000 mW/cm<sup>2</sup> | 5 s | Plus | at approx. +23 °C | 24 h*

Compression shear strength 9 MPa  
*DELO Standard 5 | **Glass | Glass** | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Compression shear strength 3 MPa  
*DELO Standard 5 | **PC | PA6** | Pretreatment: Annealing | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Compression shear strength 3 MPa  
*DELO Standard 5 | **PC | PBT** | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Compression shear strength 3 MPa  
*DELO Standard 5 | **PC | PC** | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Tensile strength 1.4 MPa  
*by the criteria of DIN EN ISO 527 | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Elongation at tear 36 %  
*by the criteria of DIN EN ISO 527 | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Young's modulus < 10 MPa  
*DMTA | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Shore hardness A 62  
*by the criteria of DIN EN ISO 868 | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Glass transition temperature -5 °C  
*DMTA | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Coefficient of linear expansion 222 ppm/K  
*DELO Standard 26 | TMA | Evaluation T: 0 °C - 160 °C | 365 nm | 200 mW/cm<sup>2</sup> | 30 s | Plus | at approx. +23 °C | 24 h*

Shrinkage <i>DELO Standard 13   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h</i>	1	vol. %
Water absorption <i>by the criteria of DIN EN ISO 62   Layer thickness: 2 mm   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h   Type of storage: Media   Medium: Distilled water   Duration: 24 h</i>	0.8	wt. %
Extractable ions <i>Chloride</i>	< 10	ppm
Extractable ions <i>Potassium</i>	< 10	ppm
Extractable ions <i>Sodium</i>	< 10	ppm
Dielectric strength <i>by the criteria of DIN EN 60243-1   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h</i>	21	kV/mm
Relative permittivity <i>by the criteria of DIN 53483-2   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h   1 kHz</i>	3.8	
Relative permittivity <i>by the criteria of DIN 53483-2   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h   1 MHz</i>	2.4	
Relative permittivity <i>by the criteria of DIN 53483-2   365 nm   200 mW/cm<sup>2</sup>   30 s   Plus   at approx. +23 °C   24 h   100 kHz</i>	3	

**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 time 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. Curing until final strength proceeds within 24 hours at room temperature. High temperatures during or after curing can lead to post-crosslinking of the adhesive which influences the physical properties of the bond. 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](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**