

DELO[®] KATIOBOND[®] EG6133

modified epoxy resin | 1C | UV-curing

free of solvents | no corrosive effect, tension-equalizing, flowable, unfilled

Function

- sealant
- electronic encapsulant
- encapsulant / potting compound

Typical area of use

- -40 - 160 °C
- pin potting

Curing

Suitable lamp types LED 365 nm, UVA

Minimum irradiation dose

LED 365 nm 1400 mW·s/cm²

Typical irradiation time

*intensity 200 mW/cm²
LED 365 nm* 30 s

Typical curing time

*at rt approx. + 23 °C
irradiated* 24 h

Processing

Processing time

in standard climate +23 °C / 50 % r. h. 14 d

Storage life in unopened original container

at 0 °C to +25 °C 9 month(s)

Technical properties

Color in cured condition in 1 mm layer thickness blue

Transparency in cured condition in 1 mm layer thickness transparent

Parameters

Density <i>by the criteria of DIN EN ISO 2811-3 liquid</i>	1.1	g/cm ³
Viscosity <i>liquid Rheometer Shear rate: 10 1/s</i>	4300	mPa·s
Maximum curable layer thickness <i>DELO Standard 20 White substrate 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	> 4	mm
Maximum curable layer thickness <i>DELO Standard 20 White substrate 365 nm 1000 mW/cm² 5 s Plus at approx. +23 °C 24 h</i>	> 4	mm
Compression shear strength <i>DELO Standard 5 Glass Glass 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	9	MPa
Compression shear strength <i>DELO Standard 5 PC PA6 Pretreatment: Annealing 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	3	MPa
Compression shear strength <i>DELO Standard 5 PC PBT 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	3	MPa
Compression shear strength <i>DELO Standard 5 PC PC 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	3	MPa
Tensile strength <i>by the criteria of DIN EN ISO 527 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	1.4	MPa
Elongation at tear <i>by the criteria of DIN EN ISO 527 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	36	%
Young's modulus <i>DMTA 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	< 10	MPa
Shore hardness A <i>by the criteria of DIN EN ISO 868 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	62	
Glass transition temperature <i>DMTA 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	-5	°C
Coefficient of linear expansion <i>DELO Standard 26 TMA Evaluation T: 0 °C - 160 °C 365 nm 200 mW/cm² 30 s Plus at approx. +23 °C 24 h</i>	222	ppm/K
Shrinkage <i>DELO Standard 13 365 nm 200 mW/cm² 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/cm² 30 s Plus at approx. +23 °C 24 h Type of storage: Media Medium: Distilled water Storage temperature: at approx. +23 °C Duration: 24 h</i>	0.8	wt. %
Extractable ions <i>Ion: Chloride</i>	< 5	ppm
Extractable ions <i>Ion: Potassium</i>	< 5	ppm
Extractable ions <i>Ion: Sodium</i>	< 5	ppm
Dielectric strength <i>by the criteria of DIN EN 60243-1 365 nm 200 mW/cm² 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/cm² 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/cm² 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/cm² 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.

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

CURING

CONSULTING

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