DELO DUALBOND® LT2266

modified epoxy resin | 1C | light-fixable / heat-curing
free of solvents | antimony-free, filled, low transmission, light-blocking, thixotropic | light-fixable, low-temperature-curing from + 60 °C, tension-equalizing, flow-resistant

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

Function
- electronic adhesive

Typical area of use
- -40 - 150 °C
- active alignment for camera modules
- chip bonding
- glass/metal bondings
- mixed bondings with plastics
- fast component fixation
- sensor bonding
- bonding of temperature-sensitive substrates
- bonding of opaque components

Curing

<table>
<thead>
<tr>
<th>Suitable lamp types</th>
<th>LED 365 nm, LED 400 nm</th>
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Typical light fixation time

| intensity 1,000 mW/cm² LED 365 nm | 1 s |

Typical curing time

| at +60 °C in air convection oven | 90 min |
| at +80 °C in air convection oven | 30 min |

Processing

| Typical adhesive application | jetting, needle dispensing |

Conditioning time (typical)

| in containers up to 50 ml | 1 h |
### Processing time

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

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<table>
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<tbody>
<tr>
<td>in containers up to 50 ml</td>
<td>3 d</td>
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</table>

### Storage life in unopened original container

*at -25 °C to -15 °C*

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<td></td>
<td>3 month(s)</td>
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### Technical properties

**Color in uncured condition**
- black

**Transparency**
- opaque

**Filler particle type**
- minerals

### Parameters

**Density**
- Based on DIN 66137-2 | liquid
  - 1.32 g/cm³

**Viscosity**
- liquid | Rheometer | Shear rate: 10 1/s | Gap: 500 µm
  - 50500 mPa·s

**Thixotropy index**
- liquid | Rheometer | Gap: 500 µm
  - 7.9

**Compression shear strength**
- DELO Standard 5 | PA | PA | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 21 MPa

- DELO Standard 5 | Al | Al | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 24 MPa

- DELO Standard 5 | Ni | Ni | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 20 MPa

- DELO Standard 5 | PC | PC | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 16 MPa

- DELO Standard 5 | LCP MR25 | LCP MR25 | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 14 MPa

**Tensile strength**
- Based on DIN EN ISO 527 | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
  - 20 MPa
### Elongation at tear
Based on DIN EN ISO 527 | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
110 %

### Young's modulus
DMTA | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
1100 MPa

### Shore hardness D
Based on DIN EN ISO 868 | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
67

### Glass transition temperature
DMTA | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
35 °C

### Coefficient of linear expansion
DELO Standard 26 | TMA | Evaluation T: -40 °C - 5 °C | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
60 ppm/K

### Coefficient of linear expansion
DELO Standard 26 | TMA | Evaluation T: 50 °C - 160 °C | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
162 ppm/K

### Water absorption
Based on DIN EN ISO 62 | 365 nm | 200 mW/cm² | 5 s | Plus | 80 °C | 60 min
0.12 wt. %

#### Converting table
- °F = (°C x 1.8) + 32
- 1 MPa = 145.04 psi
- 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.

The heating time of the components must be added to the actual curing time. It depends on component size and type of heat input. The specified curing temperature must be reached directly at the adhesive.

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.

Depending on the adhesive quantity used, exothermic reaction heat is generated which can lead to overheating. In this case, a lower curing temperature is to be selected.

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

Prefixation is performed with light. Heat curing is mandatory.

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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