DELO® PHOTOBOND® GB368

modified acrylate | 1C | UV- / VIS-curing
free of solvents | unfilled

Special features of product
▪ compliant with RoHS Directive 2015/863/EU

Typical area of use
▪ -40 - 120 °C
▪ glass/metal bondings
▪ laminar glass bonding
▪ mixed bondings with plastics

Curing

Suitable lamp types
LED 365 nm, LED 400 nm

Typical irradiation time

<table>
<thead>
<tr>
<th>Intensity (mW/cm²)</th>
<th>Duration (LED 400 nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>12</td>
</tr>
<tr>
<td>1,000</td>
<td>16</td>
</tr>
</tbody>
</table>

Processing

Conditioning time (typical)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Duration (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold, 50 ml</td>
<td>30</td>
</tr>
<tr>
<td>Cold, 1,000 ml</td>
<td>4</td>
</tr>
</tbody>
</table>

Processing time

<table>
<thead>
<tr>
<th>Climate</th>
<th>Duration (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>28</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Density</th>
<th>Viscosity</th>
<th>Compression shear strength</th>
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<th>Compression shear strength</th>
<th>Compression shear strength</th>
<th>Compression shear strength</th>
<th>Tensile strength</th>
<th>Elongation at tear</th>
<th>Young's modulus</th>
<th>Shore hardness D</th>
<th>Glass transition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0</td>
<td>5500</td>
<td>15</td>
<td>23</td>
<td>23</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>20</td>
<td>17</td>
<td>900</td>
<td>65</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>g/cm³</td>
<td>mPa·s</td>
<td>MPa</td>
<td>MPa</td>
<td>MPa</td>
<td>MPa</td>
<td>MPa</td>
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<td>MPa</td>
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<td>MPa</td>
<td>MPa</td>
<td>°C</td>
</tr>
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<td>Density</td>
<td>1.0</td>
<td>5500</td>
<td>15</td>
<td>23</td>
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<td>7</td>
<td>6</td>
<td>20</td>
<td>17</td>
<td>900</td>
<td>65</td>
<td>102</td>
</tr>
<tr>
<td>Viscosity</td>
<td>liquid</td>
<td>rheometer</td>
<td>shear rate: 10 1/s</td>
<td>gap: 500 µm</td>
<td>10 1/s</td>
<td>gap: 500 µm</td>
<td>60 mW/cm²</td>
<td>60 s</td>
<td>60 mW/cm²</td>
<td>60 s</td>
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<td>60 s</td>
</tr>
</tbody>
</table>
TECHNICAL DATASHEET

Coefficient of linear expansion
TMA | 60 mW/cm² | 90 s

236 ppm/K

Shrinkage
DELO Standard 13 | 60 mW/cm² | 90 s

7 vol. %

Water absorption
by the criteria of Din EN ISO 62 | 60 mW/cm² | 90 s | Type of storage: Media | Medium: Distilled water | Storage temperature: at approx. +23 °C

0.5 wt. %

Index of refraction
Refractometer | liquid

1.506

Decomposition temperature
DELO Standard 36 | 60 mW/cm² | 90 s

230 °C

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. Values measured after 24 h at approx. 23 °C / 50 % r.h., unless otherwise specified.

Converting table
°F = (°C x 1.8) + 32
1 inch = 25.4 mm
1 mill = 25.4 μm
1 oz = 28.3495 g
1 MPa = 145.04 psi
1 GPa = 145.04 ksi
1 cP = 1 mPa s
1 N = 0.225 lb
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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