## DELO® KATIOBOND® OM6605

**modified epoxy resin | 1C | UV-curing**
free of solvents | flowable, unfilled, surface-dry, yellowing-resistant, fast fixation, high transmission, high glass transition temperature, high water vapor barrier

### Function
- transparent material for optics manufacturing

### Typical area of use
- replication of optical features in imprint processes

### Curing

<table>
<thead>
<tr>
<th>Suitable lamp types</th>
<th>LED 365 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonding irradiation time</td>
<td>20 s</td>
</tr>
<tr>
<td>intensity 200 mW/cm²</td>
<td>LED 365 nm</td>
</tr>
<tr>
<td>Imprint irradiation time</td>
<td>60 s</td>
</tr>
<tr>
<td>intensity 200 mW/cm²</td>
<td>LED 365 nm</td>
</tr>
</tbody>
</table>

### Processing

Process-related waiting time
- to enable a non-destructive demolding: required

Storage life in unopened original container
- at +18 °C to +25 °C: 5 month(s)

### Technical properties

<table>
<thead>
<tr>
<th>Transparency</th>
<th>transparent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color in cured condition in 0.1 mm layer thickness</td>
<td>colorless</td>
</tr>
<tr>
<td>Transparency in cured condition in 0.1 mm layer thickness</td>
<td>transparent</td>
</tr>
</tbody>
</table>

### Parameters

<table>
<thead>
<tr>
<th>Density</th>
<th>1.06 g/cm³</th>
</tr>
</thead>
<tbody>
<tr>
<td>by the criteria of DIN EN ISO 2811-3</td>
<td>liquid</td>
</tr>
</tbody>
</table>
## Properties of DELO KATIOBOND OM6605

**Viscosity**
- Liquid | Rheometer | Shear rate: 10 1/s
- 170 mPa·s

**Compression shear strength**
- DELO Standard 5 | Glass | FR4 | Pretreatment: Annealing | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- >20 MPa

**Compression shear strength**
- DELO Standard 5 | Glass | Glass | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- >20 MPa

**Compression shear strength**
- DELO Standard 5 | PC | PC | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 26 MPa

**Tensile strength**
- by the criteria of DIN EN ISO 527 | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 31 MPa

**Elongation at tear**
- by the criteria of DIN EN ISO 527 | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 1.5 %

**Young’s modulus**
- DMTA | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 2800 MPa

**Shore hardness D**
- by the criteria of DIN EN ISO 868 | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 82

**Glass transition temperature**
- DMTA | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 138 °C

**Coefficient of linear expansion**
- DELO Standard 26 | TMA | Evaluation T: -40 °C - 10 °C | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 49 ppm/K

**Coefficient of linear expansion**
- DELO Standard 26 | TMA | Evaluation T: 160 °C - 200 °C | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 166 ppm/K

**Shrinkage**
- DELO Standard 13 | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h
- 4.0 vol. %

**Water absorption**
- by the criteria of DIN EN ISO 62 | Layer thickness: 4 mm | 365 nm | 200 mW/cm² | 20 s | Plus | 120 °C | 60 min | Plus | at approx. +23 °C | 24 h | Type of storage: Media | Medium: Distilled water | Duration: 24 h
- 0.19 wt. %

**Abbe number**
- Refractometer | 365 nm | 200 mW/cm² | 60 s | Plus | 120 °C | 1 h
- 53
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. Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to
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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.