DELO-DUOPOX® SJ8665

modified epoxy resin | 2C | room-temperature-curing
filled, high-strength | very good temperature resistance, suitable for DELO-AUTOMIX

Function
- structural adhesive
- electronic adhesive

Typical area of use
- -40 - 180 °C
- metal bondings

Curing

Curing time

<table>
<thead>
<tr>
<th>Condition</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>until initial strength</td>
<td>3.5 h</td>
</tr>
<tr>
<td>at rt approx. +23 °C</td>
<td></td>
</tr>
<tr>
<td>tensile shear strength 1 - 2 MPa</td>
<td></td>
</tr>
<tr>
<td>until functional strength</td>
<td>5 h</td>
</tr>
<tr>
<td>at rt approx. +23 °C</td>
<td></td>
</tr>
<tr>
<td>tensile shear strength &gt; 10 MPa</td>
<td></td>
</tr>
<tr>
<td>until final strength</td>
<td>7 d</td>
</tr>
<tr>
<td>at rt approx. +23 °C</td>
<td></td>
</tr>
<tr>
<td>until initial strength</td>
<td>5 min</td>
</tr>
<tr>
<td>at +80 °C</td>
<td></td>
</tr>
<tr>
<td>tensile shear strength 1 - 2 MPa</td>
<td></td>
</tr>
<tr>
<td>until functional strength</td>
<td>10 min</td>
</tr>
<tr>
<td>at +80 °C</td>
<td></td>
</tr>
<tr>
<td>tensile shear strength &gt; 10 MPa</td>
<td></td>
</tr>
<tr>
<td>until final strength</td>
<td>60 min</td>
</tr>
<tr>
<td>at +80 °C</td>
<td></td>
</tr>
</tbody>
</table>

Processing

Mixing ratio A : B - volume
2 : 1

Mixing ratio A : B - weight
1.65 : 1

Processing time after mixing

<table>
<thead>
<tr>
<th>Condition</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>in 20 g batch</td>
<td>15 min</td>
</tr>
<tr>
<td>at rt approx. +23 °C</td>
<td></td>
</tr>
<tr>
<td>in 100 g batch</td>
<td>40 min</td>
</tr>
<tr>
<td>at rt approx. +23 °C</td>
<td></td>
</tr>
</tbody>
</table>
Reaction temperature (max.)

in 100 g batch
at rt approx. +23 °C

166 °C

Storage life in unopened original container

up to <= 1 l
at +15 °C to +30 °C
12 month(s)
at +15 °C to +30 °C
9 month(s)

Technical properties

Color in cured condition in 1 mm layer thickness
black

Filler particle type
minerals

Parameters

Density
Component A
1.16 g/cm³

Density
Component B
1.41 g/cm³

Viscosity
Component A | Rheometer | Shear rate: 2 1/s | Gap: 500 µm
300000 mPa·s

Viscosity
Component B | Rheometer | Shear rate: 2 1/s | Gap: 500 µm
30000 mPa·s

Tensile shear strength
Based on DIN EN 1465 | Steel | Steel | Pretreatment: sand-blasted | at approx. +23 °C | 7 d
24 MPa

Tensile shear strength
Based on DIN EN 1465 | Al | Al | Pretreatment: sand-blasted | at approx. +23 °C | 168 h
32 MPa

Compression shear strength
DELO Standard 5 | Al | Al | Pretreatment: sand-blasted | at approx. +23 °C | 7 d
30 MPa

Tensile strength
Based on DIN EN ISO 527 | at approx. +23 °C | 7 d
46 MPa

Elongation at tear
Based on DIN EN ISO 527 | at approx. +23 °C | 7 d
3.5%

Young’s modulus
Based on DIN EN ISO 527 | at approx. +23 °C | 7 d
3300 MPa
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore hardness D</td>
<td>77</td>
<td>Based on DIN EN ISO 868</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>126</td>
<td>°C</td>
</tr>
<tr>
<td>Coefficient of linear expansion DELO Standard 26</td>
<td>171</td>
<td>ppm/K</td>
</tr>
<tr>
<td>Coefficient of linear expansion DELO Standard 13</td>
<td>82</td>
<td>ppm/K</td>
</tr>
<tr>
<td>Shrinkage DELO Standard 13</td>
<td>3</td>
<td>vol. %</td>
</tr>
<tr>
<td>Water absorption</td>
<td>0.15</td>
<td>wt. %</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>294</td>
<td>°C</td>
</tr>
</tbody>
</table>

**Substrate: ALU, based on DIN EN 1465**

**Media resistance after 100h:**

<table>
<thead>
<tr>
<th>Medium</th>
<th>Resistance after 100h (N/25.4mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>40</td>
</tr>
<tr>
<td>Distilled water</td>
<td>45</td>
</tr>
<tr>
<td>Diesel</td>
<td>49</td>
</tr>
<tr>
<td>Alkali</td>
<td>43</td>
</tr>
<tr>
<td>Alkali transmission fluid</td>
<td>47</td>
</tr>
</tbody>
</table>

Shore hardness D
Based on DIN EN ISO 868 | at approx. +23 °C | 7 d

Glass transition temperature
DMTA | at approx. +23 °C | 7 d

Coefficient of linear expansion
DELO Standard 26 | TMA | Evaluation T: 120 °C - 175 °C | at approx. +23 °C | 7 d

Coefficient of linear expansion
DELO Standard 26 | TMA | Evaluation T: 35 °C - 100 °C | at approx. +23 °C | 7 d

Shrinkage
DELO Standard 13 | 80 °C | 1 h

Shrinkage
DELO Standard 13 | at approx. +23 °C | 7 d

Water absorption
Based on DIN EN ISO 62 | at approx. +23 °C | 168 h | Type of storage: Media | Medium: Distilled water
| Storage temperature: at approx. +23 °C | Duration: 24 h

Decomposition temperature
DELO Standard 36 | at approx. +23 °C | 7 d | Type of storage: Temp. | Storage temperature: 100 °C | Duration: 24 h
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.

Curing can be supported or accelerated by heat input. Additional heat input can change the physical properties of the product.

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

Unless otherwise specified, the values were measured after 168 h at approx. 23 °C / 50 % r. h., and the values of heat-cured samples were measured after 24 h at approx. 23 °C / 50 % r. h.

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

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