DELO-DUOPOX® 6963

modified epoxy resin | 2C | room-temperature-curing
filled, very good temperature resistance

Special features of product
▪ compliant with RoHS Directive 2015/863/EU
▪ Long-term preheating of components is possible
▪ The filler may sediment. Therefore, the individual components must be stirred before use
▪ Any formation of bubbles during homogenization or mixing can be significantly minimized by using a processing system with vacuum unit

Function
▪ encapsulant / potting compound

Typical area of use
▪ -40 - 150 °C

Curing

Curing time

| until final strength at rt approx. +23 °C | 48 h |
| until final strength at +80 °C | 4 h |

Processing

Mixing ratio A : B - volume
9 : 4

Mixing ratio A : B - weight
3 : 1

Processing time after mixing

| in 100 g batch at rt approx. +23 °C | 240 min |

Storage life in unopened original container

at +18 °C to +25 °C
12 month(s)

Technical properties

Color in cured condition in 1 mm layer thickness
beige
## Parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Component A</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>DELO Standard 13</td>
<td>liquid</td>
<td>1.48 g/cm³</td>
</tr>
<tr>
<td>Viscosity</td>
<td>liquid</td>
<td>Viscosimeter</td>
<td>4000 mPa·s</td>
</tr>
<tr>
<td>Tensile shear strength</td>
<td>Al</td>
<td>Pretreatment: sand-blasted</td>
<td>18 MPa</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>DELO Standard 527</td>
<td>at approx. +23 °C</td>
<td>168 h</td>
</tr>
<tr>
<td>Elongation at tear</td>
<td>DELO Standard 527</td>
<td>at approx. +23 °C</td>
<td>168 h</td>
</tr>
<tr>
<td>Young’s modulus</td>
<td>DELO Standard 527</td>
<td>at approx. +23 °C</td>
<td>168 h</td>
</tr>
<tr>
<td>Shore hardness D</td>
<td>DELO Standard 868</td>
<td>at approx. +23 °C</td>
<td>168 h</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>DELO Standard 24</td>
<td>Rheometer</td>
<td>67 °C</td>
</tr>
<tr>
<td>Coefficient of linear expansion</td>
<td>DELO Standard 26</td>
<td>TMA</td>
<td>Evaluation T: 30 °C - 140 °C</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>DELO Standard 13</td>
<td>at approx. +23 °C</td>
<td>168 h</td>
</tr>
<tr>
<td>Water absorption</td>
<td>DELO Standard 62</td>
<td>Layer thickness: 4 mm</td>
<td>at approx. +23 °C</td>
</tr>
<tr>
<td>Volume resistivity</td>
<td>&gt;1E13</td>
<td>Ohm·cm</td>
<td></td>
</tr>
<tr>
<td>Surface resistance</td>
<td>&gt;1E12</td>
<td>Ohm</td>
<td></td>
</tr>
</tbody>
</table>
Dielectric strength
by the criteria of DIN EN 60243-1
22 kV/mm

Relative permittivity
by the criteria of VDE 0303-4
4.2

Comparative Tracking Index M
by the criteria of DIN EN 60112
600

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