DELO-DUOPOX® AD895

Multi-purpose 2-component epoxy resin, cures at room temperature, medium-viscous, filled

**Base**
- epoxy resin
- two-component

**Use**
- high-strength construction adhesive
- multi-purpose
- the cured product is normally used in a temperature range of -40 °C to +140 °C; depending on the application, other limits may be more reasonable
- tested for biocompatibility and meets the requirements according to DIN EN ISO 10993-5: test for cytotoxicity
- compliant with RoHS directive 2015/863/EU

**Processing**
- supplied ready for use and can be processed well from the original container
- components A and B must be mixed homogeneously in the mixing ratio stated below
- using the DELO-AUTOMIX system for processing is especially advantageous
- the surfaces to be bonded must be dry as well as free of dust, grease and other contaminations
- use DELOTHEN cleaners for the cleaning of bonding surfaces

**Curing**
- proceeds at room temperature (approx. 23 °C)
- increased temperatures accelerate curing
- applying heat could change physical characteristics

**Technical data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td>grey</td>
</tr>
<tr>
<td><strong>Filler</strong></td>
<td>minerals</td>
</tr>
<tr>
<td><strong>Mixing ratio</strong></td>
<td></td>
</tr>
<tr>
<td>(A : B) according to weight</td>
<td>7 : 3</td>
</tr>
<tr>
<td>(A : B) according to volume</td>
<td>2 : 1</td>
</tr>
<tr>
<td><strong>Density of component A [g/cm³]</strong></td>
<td>1.37</td>
</tr>
<tr>
<td>DELO Standard 13 at room temperature (approx. 23 °C)</td>
<td></td>
</tr>
<tr>
<td><strong>Density of component B [g/cm³]</strong></td>
<td>1.19</td>
</tr>
<tr>
<td>DELO Standard 13 at room temperature (approx. 23 °C)</td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity of component A [mPas]</strong></td>
<td>pasty</td>
</tr>
<tr>
<td>at 23 °C, rheometer</td>
<td></td>
</tr>
</tbody>
</table>
Viscosity of component B [mPas]
at 23 °C, rheometer

Processing time in 100 g preparation [min]
at room temperature (approx. 23 °C)

Maximum reaction temperature [°C]
in 100 g preparation

Curing time until initial strength [h]
tensile shear strength 1 - 2 MPa
at room temperature (approx. 23 °C)

Curing time until functional strength [h]
tensile shear strength > 10 MPa
at room temperature (approx. 23 °C)

Curing time until final strength [h]
at room temperature (approx. 23 °C)

**Tensile shear strength Al/Al [MPa]**
by the criteria of DIN EN 1465, sand-blasted
component thickness 1.6 mm, gap 0.1 mm
curing: 7 d at room temperature (approx. 23 °C)

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by the criteria of DIN EN 1465, sand-blasted
component thickness 1.6 mm, gap 0.1 mm
curing: 7 d at room temperature (approx. 23 °C)

Tensile shear strength Al/Al [MPa]
DELO Standard 39, sand-blasted
component thickness: 6 mm
curing: 7 d at room temperature (approx. 23 °C)

Floating roller peel resistance St/St [N/mm]
DELO Standard 38, St/St sand-blasted
component thickness: 1.6 mm and 0.5 mm

**Tensile strength [MPa]**
According to standard DIN EN ISO 527
Layer thickness: 4 mm
Curing: 7 d room temperature (approx. 23 °C)

Elongation at tear [%]
According to standard DIN EN ISO 527
Layer thickness: 4 mm
Curing: 7 d room temperature (approx. 23 °C)

**Young's modulus [MPa]**
According to standard DIN EN ISO 527
Layer thickness: 4 mm
Curing: 7 d room temperature (approx. 23 °C)

**Shore hardness D**
according to DIN EN ISO 868

![Graph](https://via.placeholder.com/150)

**RT** = room temperature (approx. 23 °C)
Glass transition temperature [°C] 66
Rheometer, 2nd heating process

Coefficient of linear expansion [ppm/K] 88
TMA, in a temperature range of +30 to +50 °C

Coefficient of linear expansion [ppm/K] 178
TMA, in a temperature range of +70 to +150 °C

Shrinkage [vol. %] 4
DELO Standard 13

Water absorption [weight %] 0.25
according to DIN EN ISO 62, 24 h at room temperature (approx. 23 °C)

Decomposition temperature [°C] 200
DELO Standard 36

Specific volume resistance [Ωcm] >1xE13
VDE 0303, part 30

Surface resistance [Ω] >1xE13
VDE 0303, part 30

Dielectric strength [kV/mm] 13.7
DIN IEC 60243-1 at 50 Hz

Dielectric constant 4.0
RF-IV method, 1 MHz

Dielectric constant 4.0
RF-IV method, 10 MHz

Dielectric constant 3.9
RF-IV method, 100 MHz

Dielectric constant 3.7
RF-IV method, 1 GHz

Creep resistance CTI 600 M
VDE 0303, part 11, DIN EN 60112

Storage life at room temperature (approx. 23 °C) 12 months
in unopened original container (volume per component < 1l)

Storage life at room temperature (approx. 23 °C) 6 months
in unopened original container (volume per component >= 1l)
Performance under temperature influence

tensile shear strength Al/Al sand-blasted after temperature storage
based on initial value at room temperature
measured at room temperature (approx. 23 °C)
according to DIN EN 1465

Young's modulus after temperature storage
based on initial value at room temperature
measured at room temperature (approx. 23 °C)
according to DIN EN 527, test specimen type 1B, thickness 2 mm

tensile strength after temperature storage
based on initial value at room temperature
measured at determined temperature
according to DIN EN 527, test specimen type 1B, thickness 2 mm

Performance under chemical influence
compression shear strength after storage for 1,000 h
based on initial value at room temperature
measured at room temperature (approx. 23 °C)
according to DELO Standard 5

<table>
<thead>
<tr>
<th>Chemical medium</th>
<th>Compression/shear strength Al/Al [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol denatured</td>
<td>124</td>
</tr>
<tr>
<td>ethanol 70 % denatured</td>
<td>103</td>
</tr>
<tr>
<td>ATF gear oil</td>
<td>137</td>
</tr>
<tr>
<td>petrol</td>
<td>107</td>
</tr>
<tr>
<td>Diesel fuel</td>
<td>140</td>
</tr>
<tr>
<td>engine oil 10W40</td>
<td>136</td>
</tr>
<tr>
<td>acetic acid 10 %</td>
<td>73</td>
</tr>
<tr>
<td>demineralised water / glykol mixture 50:50</td>
<td>129</td>
</tr>
<tr>
<td>demineralised water</td>
<td>121</td>
</tr>
</tbody>
</table>
Instructions and advice

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
The instructions for use of DELO-DUPOX are available on: www.DELO.de. We will be pleased to send them to you on demand.

Occupational health and safety
see material safety data sheet

Specification
The properties in italics are part of the specification. Ranges with clear limits are defined for them and others, where applicable. In the course of the QA test, each batch is tested for these properties and the maintenance of the limits is ensured. The measuring methods used can deviate from those specified in the data sheet. Details can be found in the QA test report.