

DELO-DUOPOX® AD848

Multi-purpose 2c epoxy resin, cures at room temperature, high-viscous, filled

Base

- epoxy resin
- two-component, thixotropic

Use

- high-strength construction adhesive
- multi-purpose
- the cured product is normally used in a temperature range of -40 °C to +150 °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

<i>Color</i>	dark gray
Filler	minerals
Mixing ratio (A : B) according to weight	0.87 : 1
(A : B) according to volume	1 : 1
Density of component A [g/cm ³] DELO Standard 13 at room temperature (approx. 23 °C)	1.19
Density of component B [g/cm ³] DELO Standard 13 at room temperature (approx. 23 °C)	1.37
Viscosity of component A [mPas] at 23 °C, rheometer	310000

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Viscosity of component B [mPas] at 23 °C, rheometer	530000
Processing time in 100 g preparation [min] at room temperature (approx. 23 °C)	90
Curing time until initial strength [h] tensile shear strength 1 - 2 MPa at room temperature (approx. 23 °C)	7
Curing time until functional strength [h] tensile shear strength > 10 MPa at room temperature (approx. 23 °C)	16
<i>Tensile shear strength Al/Al</i> [MPa] by the criteria of DIN EN 1465, sand-blasted component thickness 1.6 mm, gap 0.1 mm curing: 24 h at room temperature (approx. 23 °C)	16
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)	21
Tensile shear strength Al/Al [MPa] by the criteria of DIN EN 1465, blank component thickness 1.6 mm, gap 0.1 mm curing: 7 d at room temperature (approx. 23 °C)	17
Tensile shear strength St/St [MPa] by the criteria of DIN EN 1465, blank component thickness 1.6 mm, gap 0.1 mm curing: 7 d at room temperature (approx. 23 °C)	19
Tensile shear strength stainless steel/ stainless steel [MPa] by the criteria of DIN EN 1465, blank component thickness 1.6 mm, gap 0.1 mm curing: 7 d at room temperature (approx. 23 °C)	22
Compression shear strength FR4/FR4 [MPa] DELO Standard 5	32
Compression shear strength PA/PA [MPa] standard DELO 5	18
Compression shear strength PBT/PBT [MPa] DELO Standard 5	5
Floating roller peel resistance St/St [N/mm] DELO Standard 38, sand-blasted Curing: 96 h at room temperature (approx. 23 °C)	7
Tensile strength [MPa] according to DIN EN ISO 527	30
Elongation at tear [%] according to DIN EN ISO 527	4
Young's modulus [MPa] according to DIN EN ISO 527	1800
Shore hardness D according to DIN EN ISO 868 curing: 7 d room temperature	75
Glass transition temperature [°C] DELO Standard 24, Rheometer, 2nd heating process	70
Shrinkage [vol. %] DELO Standard 13	2

Decomposition temperature [°C]

283

DELO Standard 36

Storage life at room temperature (approx. 23 °C)

6 months

in unopened original container (volume per component < 1l)

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

Chemical medium	Compression/shear strength AI/AI [%]
ATF gear oil	84
diesel fuel	51
kerosene	78
engine oil	85
glycol	106
brake fluid	69
distilled water	29
glycol/ water	37

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.

Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent.

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-DUOPOX 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.