

DELO-DUOPOX[®] CR8712

modified epoxy resin | 2C | heat-curing

thixotropic, filled, very good temperature resistance, very good media resistance

Special features of product

- compliant with RoHS Directive 2015/863/EU
- halogen-free according to IEC 61249-2-21
- Component B is humidity-sensitive
- 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
- electronic encapsulant

Typical area of use

- -40 - 180 °C

Curing

Curing time

<i>until final strength at +150 °C</i>	10	min
<i>until final strength at +130 °C</i>	30	min

Processing

Mixing ratio A : B - volume	0.65 : 1
Mixing ratio A : B - weight	0.59 : 1
Open time after mixing	6 h
Storage life in unopened original container <i>at +18 °C to +25 °C</i>	6 month(s)

Technical properties

Color in cured condition in 1 mm layer thickness	black
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Transparency in cured condition in 1 mm layer thickness opaque

Parameters

Density 1.59 g/cm³
Component A | by the criteria of DIN 66137-2 | liquid

Density 1.76 g/cm³
Component B | by the criteria of DIN 66137-2 | liquid

Viscosity 8000 mPa·s
Component A | by the criteria of DIN 53019 | liquid | Rheometer | Shear rate: 10 1/s | Gap: 500 µm

Viscosity 4500 mPa·s
Component B | by the criteria of DIN 53019 | liquid | Rheometer | Shear rate: 10 1/s | Gap: 500 µm

Tensile shear strength 10 MPa
*by the criteria of DIN EN 1465 | **AI** | **AI** | Pretreatment: sand-blasted | 150 °C | 10 min*

Compression shear strength 25 MPa
*DELO Standard 5 | **AI** | **AI** | 150 °C | 10 min*

Compression shear strength 31 MPa
*DELO Standard 5 | **AI** | **AI** | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h*

Compression shear strength 25 MPa
*DELO Standard 5 | **PPS** | **PPS** | 150 °C | 10 min*

Tensile strength 65 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min

Tensile strength 59 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h

Tensile strength 54 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h | Type of storage: Media | Medium: Automatic transmission fluid

Elongation at tear 0.6 %
by the criteria of DIN EN ISO 527 | 150 °C | 10 min

Elongation at tear 0.5 %
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h

Elongation at tear 0.5 %
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h | Type of storage: Media | Medium: Automatic transmission fluid

Young's modulus 12000 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min

Young's modulus 11500 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h

Young's modulus 12000 MPa
by the criteria of DIN EN ISO 527 | 150 °C | 10 min | Type of storage: Temp. | Storage temperature: 160 °C | Duration: 1000 h | Type of storage: Media | Medium: Automatic transmission fluid

Shore hardness D 90
by the criteria of DIN EN ISO 868 | 150 °C | 10 min

Glass transition temperature 190 °C
DELO Standard 26 | TMA | 150 °C | 10 min

Coefficient of linear expansion 25 ppm/K
DELO Standard 26 | TMA | Evaluation T: 30 °C - 150 °C | 150 °C | 10 min

Shrinkage 1.8 vol. %
DELO Standard 13 | 150 °C | 10 min

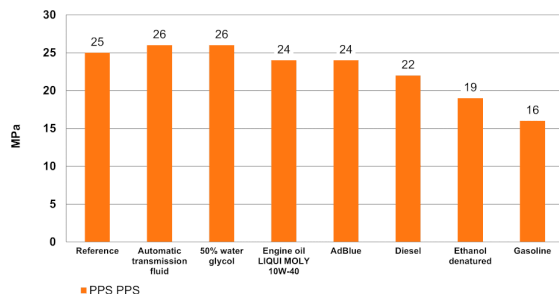
Water absorption 0.10 wt. %
by the criteria of DIN EN ISO 62 | Layer thickness: 4 mm | 150 °C | 10 min | Type of storage: Media | Medium: Distilled water | Duration: 24 h

Decomposition temperature 330 °C
DELO Standard 36 | 150 °C | 10 min

Dielectric strength 23 kV/mm
by the criteria of DIN EN 60243-1 | 150 °C | 20 min

Comparative Tracking Index 600
by the criteria of DIN EN 60112 | 150 °C | 20 min

Compression shear strength after media storage for 1000 h, DELO Standard 5



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

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

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CONTACT

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ADHESIVES

DISPENSING

CURING

CONSULTING