DELO-DUOPOX® FR898

modified epoxy resin | 2C | room-temperature-curing

filled | suitable for DELO-AUTOMIX

Special features of product

- compliant with RoHS Directive 2015/863/EU
- UL listing: UL file E467212 (Yellow Card)
- passes ANSI/UL 94 V-0 Flame Test

Typical area of use

- -40 - 140 °C

Curing

Curing time		
until initial strength *tensile shear strength 1 - 2 MPa*	4.5	h
until functional strength *at rt approx. +23 °C* *tensile shear strength > 10 MPa*	8	h

Processing

Mixing ratio A : B - volume	2 : 1	
Mixing ratio A : B - weight	7 : 3	
Processing time after mixing		
in 100 g batch *at rt approx. +23 °C*	34	min
Reaction temperature (max.)		
in 100 g batch	85	°C
Storage life in unopened original container		
up to <= 1 l *at +15 °C to +30 °C*	9	month(s)
at +15 °C to +30 °C	6	month(s)

Technical properties

Color in cured condition in 1 mm layer thickness	gray

Density of component A	1.32	g/cm³
Density of component B	1.13	g/cm³

Parameters

Viscosity *Component A | liquid | Viscosimeter*	150000	mPa·s
Viscosity *Component B | liquid | Viscosimeter*	50000	mPa·s
Tensile shear strength *Based on DIN EN 1465 | **Al** | **Al** | Pretreatment: sand-blasted | at approx. +23 °C | 24 h*	18	MPa
Peel resistance *DELO Standard 38 | **Steel** | **Steel** | Pretreatment: sand-blasted | at approx. +23 °C | 7 d*	3	N/mm
Tensile strength *Based on DIN EN ISO 527 | at approx. +23 °C | 7 d*	36	MPa
Elongation at tear *Based on DIN EN ISO 527 | at approx. +23 °C | 7 d*	2	%
Young's modulus *Based on DIN EN ISO 527 | at approx. +23 °C | 7 d*	2400	MPa
Shore hardness D *Based on DIN EN ISO 868 | at approx. +23 °C | 7 d*	77	
Glass transition temperature *DELO Standard 24 | Rheometer | at approx. +23 °C | 7 d*	54	°C
Coefficient of linear expansion *DELO Standard 26 | TMA | Evaluation T: 30 °C - 50 °C | at approx. +23 °C | 7 d*	102	ppm/K
Coefficient of linear expansion *DELO Standard 26 | TMA | Evaluation T: 80 °C - 160 °C | at approx. +23 °C | 7 d*	172	ppm/K
Shrinkage *DELO Standard 13 | at approx. +23 °C | 7 d*	4	vol. %
Water absorption *Based on DIN EN ISO 62 | at approx. +23 °C | 7 d | Type of storage: Media | Medium: Distilled water | Storage temperature: at approx. +23 °C | Duration: 24 h*	0.22	wt. %
Decomposition temperature *DELO Standard 36 | at approx. +23 °C | 7 d | Type of storage: Temp. | Storage temperature: 100 °C | Duration: 24 h*	253	°C

Volume resistivity *Based on DIN IEC 60093*	>1xE15	Ohm·cm
Surface resistance *Based on DIN IEC 60093*	>1xE15	Ohm
Dielectric strength *Based on DIN EN 60243-2*	18	kV/mm
Creep resistance CTI *Based on DIN EN 60112*	300	
Relative permittivity *Based on DIN 53483-2 | 1 MHz*	3.6	
Relative permittivity *Based on DIN 53483-2 | 1 kHz*	4.4	
Relative permittivity *Based on DIN 53483-2 | 100 kHz*	3.9	

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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constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent.
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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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