

DELOMONOPOX® AD288

heat-curing adhesive

Base

- epoxy resin
- one-component, heat-curing, filled

Use

- construction adhesive, for the fixing of components and assembly groups
- excellent as climate-resistant sealant for mixed bondings
- 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
- compliant with RoHS directive 2011/65/EU

Processing

- the adhesive is supplied ready for use; in case of cool storage, it must be ensured that the container is conditioned to room temperature before use
- the containers are conditioned at room temperature (max. 25 °C); the conditioning time is approx. 0.5 h for containers up to 10 ml and approx. 2 h for containers up to 310 ml; additional heat addition is not allowed
- the surfaces to be bonded must be dry as well as free of dust, grease and other contaminations

Curing

- curing proceeds at temperatures between +130 and +180 °C at the adhesive
- to heat the components, increased temperatures can be used, as well
- the heating time of the components must be added to the actual curing time
- for curing, the inside of the adhesive layer must have the required temperature
- depending on the adhesive amount used, exothermic reaction heat is developed which can lead to overheating; in this case, the curing temperature must be reduced accordingly
- increased temperatures shorten the curing process, lower temperatures extend it, and can change the properties of the cured product
- the curing times of the adhesive at the curing temperatures recommended can be drawn from the technical data

Technical data

Color light beige

Filler minerals

Density [g/cm³] 1.38
DELO Standard 13
at room temperature (approx. 23 °C)

Viscosity [mPas] 85000
at 23 °C, rheometer, 10 1/s

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Curing time until final strength [min] at +140 °C in a convection oven	40
Tensile shear strength Al/Al [MPa] DIN EN 1465, sand-blasted component thickness: 1.6 mm after 40 min at +140 °C	8
Tensile strength [MPa] according to DIN EN ISO 527 layer thickness: 2 mm after 40 min at +140 °C	2.5
Elongation at tear [%] according to DIN EN ISO 527 layer thickness: 2 mm after 40 min at +140 °C	200
Decomposition temperature [°C] DELO Standard 36 TGA 25...400 °C/10... iso 5 min, Al-BK	240
Glass transition temperature [°C] DSC	10
Coefficient of linear expansion [ppm/K] TMA, in a temperature range of +30 to +150 °C	190
Shrinkage [vol. %] DELO Standard 13	2.1
Water absorption [weight %] according to DIN EN ISO 62 after 40 min at +140 °C	1.3
Dielectric strength [kV/mm] DIN IEC 60243-1 at 50 Hz	6.3
Dielectric constant RF-IV method, 1 MHz, at 25 °C +/- 3 °C	6.2
Dielectric constant RF-IV method, 10 MHz, at 25 °C +/- 3 °C	5.9
Dielectric constant RF-IV method, 100 MHz, at 25 °C +/- 3 °C	5.0
Dielectric constant RF-IV method, 1 GHz, at 25 °C +/- 3 °C	4.4
Storage life at room temperature (max. 25 °C) in unopened original container	4 weeks
Storage life at 0 °C to +10 °C in unopened original container	6 months

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.

Many product properties are subject to temperature and may change permanently, especially at high temperatures.

It is the user's responsibility to test the suitability of the product for the intended purpose and temperature range of use by considering all specific requirements. Type and 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. Verbal ancillary agreements are deemed not to exist.

Instructions for use

The instructions for use of DELOMONOPOX 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.