

DELO-DUOPOX® 6963

Base

- epoxy casting resin
- two-part
- product free of nonylphenol

Use

- universally useable embedding compound
- for embedding in machine and equipment manufacture
- for embedding in electrical engineering and electronics
- high temperature resistance
- low exothermia, suitable for larger batch quantities, universal

Application

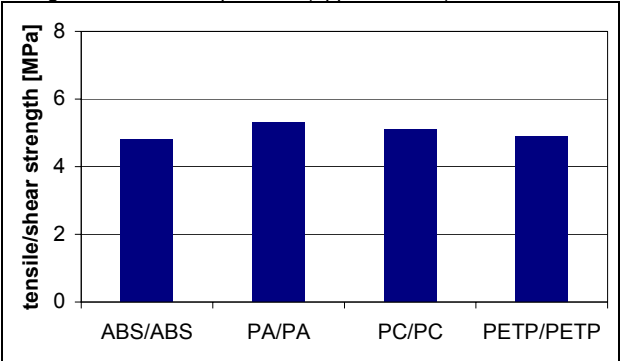
- components A and B must be mixed well or homogenised according to beneath stated mixing ratio
- due to the pureness of the resin, there might be crystallisation (solidification of the product); when heating up to approx. +40 to +50°C crystallisation is reversible
- stir well before use
- supplied ready to use and best applied from the original container
- surfaces to be bonded should be dry, free from dust, grease and other contaminants
- DELOTHEN cleaners are recommended for cleaning

Curing

- at room temperature
- higher temperatures accelerate curing

Technical data

colour	beige
filler	minerals
mixing ratio (A : B) by weight	3 : 1
(A : B) by volume	9 : 4
density [g/cm ³] mixture at room temperature (ca. 23 °C)	1.34
viscosity component A [mPas] brookfield at 23 °C	4000
viscosity component B [mPas] brookfield at 23 °C	27000

viscosity mixture [mPas] brookfield at 23 °C	5000										
pot life in 100 g preparation [min] DIN EN 14022, at 23 °C	210										
pot life in 1 kg preparation [min] DIN EN 14022, at 23 °C	120										
processing time in 100 g preparation [min] at 23 °C	240										
maximum reaction temperature [°C] in 100 g preparation	30										
maximum reaction temperature [°C] in 1 kg preparation	70										
curing time until final strength [h] at room temperature (approx. 23 °C)	48										
curing time until final strength [h] at +80 °C	4										
tensile/shear strength Al/Al [MPa] DIN EN 1465, sand-blasted join part thickness: 1.6 mm after 24 h at room temperature (ca. 23 °C)	18										
tensile/shear strength DIN EN 1465 curing: 7 d at room temperature (approx. 23 °C)											
 <table border="1"> <caption>Tensile/Shear Strength Data from Chart</caption> <thead> <tr> <th>Material Pair</th> <th>Tensile/Shear Strength [MPa]</th> </tr> </thead> <tbody> <tr> <td>ABS/ABS</td> <td>~4.8</td> </tr> <tr> <td>PA/PA</td> <td>~5.2</td> </tr> <tr> <td>PC/PC</td> <td>~5.0</td> </tr> <tr> <td>PETP/PETP</td> <td>~4.8</td> </tr> </tbody> </table>		Material Pair	Tensile/Shear Strength [MPa]	ABS/ABS	~4.8	PA/PA	~5.2	PC/PC	~5.0	PETP/PETP	~4.8
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ABS/ABS	~4.8										
PA/PA	~5.2										
PC/PC	~5.0										
PETP/PETP	~4.8										
tensile strength [MPa] DIN EN ISO 527	20										
elongation at tear [%] DIN EN ISO 527	5										
Young modulus [MPa] DIN EN ISO 527	1100										
shore hardness D DIN 53505	70										
indentation hardness [MPa] ISO 2039, part 1	77										
coefficient of elongation [ppm/K] TMA, in a temperature range of +30 to +140 °C	164										
shrinkage [vol. %] standard DELO 13	1 - 2										
water absorption [weight %] DIN EN ISO 62, 24 h at room temperature (approx. 23 °C)	0.2										

chemical stability	very good
recommended long-time temperature range of use [°C]	-40 to +150
short-time temperature of use [°C]	+200
specific volume resistance [Ωcm] VDE 0303, part 3	5.1xE14
surface resistance [Ω] VDE 0303, part 3	9.0xE12
breakdown voltage [kV/mm] VDE 0303, part 2	22.3
dielectric constant VDE 0303, part 4	4.2
creep resistance CTI VDE 0303, part 1, IEC 112	> 600 M
storage life at room temperature (approx. 23 °C) in unopened original container	12 months

Recommendations

General

The data and information provided are based on tests performed under laboratory conditions. Reliable information about the behaviour of the product under practical conditions and its suitability for a specific purpose cannot be concluded from this.

It is the user's responsibility to test the suitability of the product for the intended purpose 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 behaviour of the product compared to its behaviour 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.

Instruction for use

The instruction for use is available under following address: www.DELO.de. If requested we will also be pleased to send it to you.

Industrial health and safety standards

see material safety data sheet

Specification

see quality assurance certificate