

DELO[®] PHOTOBOND[®] SR4060

modified acrylate | 1C | UV- / VIS-curing

free of solvents | thixotropic, unfilled

Special features of product

- compliant with RoHS Directive 2015/863/EU
- compliant with limits of VOC content in adhesive acc. to GB33372-2020

Typical area of use

- -40 - 150 °C
- mixed bondings with plastics
- bonding of voice coil and membrane in miniloudspeakers

Curing

| | | |
|---|------------------------|---|
| Suitable lamp types | LED 365 nm, LED 400 nm | |
| Typical irradiation time | | |
| <i>intensity 200 mW/cm² LED 400 nm</i> | 5 | s |
| <i>intensity 1,000 mW/cm² LED 400 nm</i> | 3 | s |

Processing

| | | |
|--|----------------------------|----------|
| Typical adhesive application | jetting, needle dispensing | |
| Conditioning time (typical) | | |
| <i>when stored in cold conditions in containers up to 50 ml</i> | 1 | h |
| <i>when stored in cold conditions in containers up to 600 ml</i> | 5 | h |
| Storage life in unopened original container | | |
| <i>up to <= 1 l at 0 °C to +25 °C</i> | 6 | month(s) |

Technical properties

| | |
|--|------------------------|
| Transparency | transparent |
| Color in cured condition in 0.1 mm layer thickness | red |
| Fluorescence | red + blue fluorescent |

Parameters

| | | |
|---|-------|-------------------|
| Density <i>DELO Standard 13 liquid</i> | 1.10 | g/cm ³ |
| Viscosity <i>liquid Rheometer Shear rate: 2 1/s Gap: 500 µm</i> | 33000 | mPa·s |
| Viscosity <i>liquid Rheometer Shear rate: 10 1/s Gap: 500 µm</i> | 9500 | mPa·s |
| Thixotropy index <i>liquid Rheometer Gap: 500 µm</i> | 6.4 | |
| Compression shear strength <i>DELO Standard 5 Glass AI 400 nm 200 mW/cm² 10 s</i> | 9 | MPa |
| Compression shear strength <i>DELO Standard 5 PC PC 400 nm 200 mW/cm² 10 s</i> | 18 | MPa |
| Peel resistance <i>DELO Standard 34 PET PET 400 nm 200 mW/cm² 10 s Type of storage: Temp. Storage temperature: at approx. +23 °C Duration: 24 h</i> | 30 | N/cm |
| Tensile strength <i>by the criteria of DIN EN ISO 527 400 nm 200 mW/cm² 60 s</i> | 12 | MPa |
| Young's modulus <i>DMTA 400 nm 200 mW/cm² 60 s</i> | 150 | MPa |
| Shore hardness A <i>by the criteria of DIN EN ISO 868 400 nm 200 mW/cm² 120 s</i> | 75 | |
| Shore hardness D <i>by the criteria of DIN EN ISO 868 400 nm 200 mW/cm² 120 s</i> | 30 | |
| Glass transition temperature <i>DMTA 400 nm 200 mW/cm² 60 s</i> | 45 | °C |
| Coefficient of linear expansion <i>DELO Standard 26 TMA Evaluation T: 30 °C - 130 °C 400 nm 200 mW/cm² 60 s</i> | 230 | ppm/K |
| Shrinkage <i>400 nm 200 mW/cm² 60 s</i> | 6.0 | vol. % |
| Water absorption <i>by the criteria of DIN EN ISO 62 Layer thickness: 2 mm 400 nm 200 mW/cm² 60 s Type of storage: Media Medium: Distilled water Duration: 24 h</i> | 9.4 | wt. % |

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. Increasing or decreasing the curing temperature and / or irradiation intensity and / or irradiation time shortens or prolongs the curing time and can lead to changed physical properties. All curing or light fixation parameters depend on material thickness and absorption, adhesive layer thickness, lamp type and distance between lamp and adhesive layer. 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

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