

DELO DUALBOND® SJ4760

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

free of solvents | dual-curing, thixotropic

Special features of product

- compliant with RoHS Directive 2015/863/EU

Function

- electronic adhesive

Typical area of use

- 40 - 150 °C

Curing

Suitable lamp types LED 365 nm, LED 400 nm

Typical irradiation time

*intensity 200 mW/cm²
LED 400 nm* 6 s

*intensity 1000 mW/cm²
LED 400 nm* 3 s

Typical curing time

*at +110 °C
in air convection oven* 30 min

Processing

Typical adhesive application needle dispensing, jetting

Conditioning time (typical)

*when stored in cold conditions
in containers up to 50 ml* 30 min

*when stored in cold conditions
in containers up to 600 ml* 4 h

Processing time

*in standard climate +23 °C / 50 % r. h.
in containers up to 50 ml* 30 d

*in standard climate +23 °C / 50 % r. h.
in containers up to 600 ml* 7 d

Storage life in unopened original container

up to <= 1 l
at 0 °C to +10 °C

6 month(s)

Technical properties

Color in uncured condition

black

Parameters

Density
DELO Standard 13 | liquid

1.05 g/cm³

Viscosity
liquid | Rheometer | Shear rate: 2 1/s | Gap: 500 µm

20000 mPa·s

Viscosity
liquid | Rheometer | Shear rate: 10 1/s | Gap: 500 µm

8000 mPa·s

Compression shear strength
*DELO Standard 5 | **Glass | AI** | 400 nm | 200 mW/cm² | 30 s*

15 MPa

Compression shear strength
*DELO Standard 5 | **Glass | FR4** | 400 nm | 200 mW/cm² | 30 s*

20 MPa

Compression shear strength
*DELO Standard 5 | **Glass | Glass** | 400 nm | 200 mW/cm² | 30 s*

16 MPa

Tensile strength
by the criteria of DIN EN ISO 527 | 110 °C | 30 min

17 MPa

Elongation at tear
by the criteria of DIN EN ISO 527 | 110 °C | 30 min

240 %

Young's modulus
DMTA | 400 nm | 200 mW/cm² | 60 s

730 MPa

Shore hardness D
by the criteria of DIN EN ISO 868 | 110 °C | 30 min

40

Glass transition temperature
DMTA | 400 nm | 200 mW/cm² | 60 s

90 °C

Coefficient of linear expansion
DELO Standard 26 | TMA | Evaluation T: -40 °C - 80 °C | 110 °C | 30 min

177 ppm/K

Shrinkage
110 °C | 30 min

6 vol. %

Water absorption 1.8 wt. %
by the criteria of DIN EN ISO 62 | Layer thickness: 4 mm | 110 °C | 30 min | Type of storage: Media | Medium: Distilled water | Storage temperature: at approx. +23 °C

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. The heating time of the components must be added to the actual curing time. It depends on component size and type of heat input. The specified curing temperature must be reached directly at the adhesive. 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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