DELO DUALBOND® SJ4725

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

free of solvents | dual-curing, flowable, filled, light-fixable, tension-equalizing

Special features of product

- compliant with RoHS Directive 2015/863/EU
- halogen-free according to IEC 61249-2-21

Typical area of use

- -40 - 120 °C

Curing

Suitable lamp types	LED 365 nm, LED 400 nm, LED 460 nm	
Typical irradiation time		
intensity 200 mW/cm² LED 400 nm layer thickness 100 µm	10	s
Typical curing time		
at +110 °C in air convection oven	15	min

Processing

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 1,000 ml	4	h
Processing time		
in standard climate +23 °C / 50 % r. h. in containers up to 50 ml	14	d
in standard climate +23 °C / 50 % r. h. in containers up to 1,000 ml	7	d
Storage life in unopened original container		
up to <= 55 ml at 0 °C to +10 °C	3	month(s)

Technical properties

Color in uncured condition	reddish
Color in cured condition in 0.1 mm layer thickness	red
Color in cured condition in 1 mm layer thickness	red
Fluorescence	red fluorescent

Parameters

Density *by the criteria of DIN 66137-2 | liquid*	1	g/cm³
Viscosity *by the criteria of DIN 53019 | liquid | Rheometer | Shear rate: 2 1/s | Gap: 500 µm*	2500	mPa·s
Compression shear strength *DELO Standard 5 | **Al** | **Al** | 400 nm | 200 mW/cm² | 5 s | Plus | 100 °C | 20 min*	20	MPa
Compression shear strength *DELO Standard 5 | **Stainless steel** | **Stainless steel** | 400 nm | 200 mW/cm² | 5 s | Plus | 100 °C | 20 min*	25	MPa
Compression shear strength *DELO Standard 5 | **Glass** | **Glass** | 400 nm | 200 mW/cm² | 30 s | Plus | 100 °C | 20 min*	16	MPa
Compression shear strength *DELO Standard 5 | **Glass** | **PA6** | 400 nm | 200 mW/cm² | 30 s | Plus | 100 °C | 20 min*	10	MPa
Compression shear strength *DELO Standard 5 | **PEEK** | **FR4** | 400 nm | 200 mW/cm² | 5 s | Plus | 100 °C | 20 min*	5	MPa
Tensile strength *by the criteria of DIN EN ISO 527 | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	18	MPa
Elongation at tear *by the criteria of DIN EN ISO 527 | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	250	%
Young's modulus *DMTA | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	700	MPa
Shore hardness D *by the criteria of DIN EN ISO 868 | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	43	
Glass transition temperature *DMTA | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	78	°C

Coefficient of linear expansion *DELO Standard 26 | TMA | Evaluation T: 110 °C - -50 °C | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	210	ppm/K
Shrinkage *DELO Standard 13 | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min*	6.5	vol. %
Water absorption *by the criteria of DIN EN ISO 62 | Layer thickness: 4 mm | 400 nm | 200 mW/cm² | 60 s | Plus | 100 °C | 20 min | Type of storage: Media | Medium: Distilled water | Storage temperature: at approx. +23 °C | Duration: 24 h*	0.54	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.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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