

DELO PHOTOBOND AD491

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

free of solvents | transparent

Special features of product

- compliant with RoHS Directive 2015/863/EU

Typical area of use

- -40 - 120 °C

Curing

Suitable lamp types

LED 365 nm, LED 400 nm,
UVA

Recommended irradiation time

*intensity 55 - 60 mW/cm²
UVA*

7 s

Processing

Adhesive application

needle-dispensable

Storage life in unopened original container

at +18 °C to +25 °C

6 month(s)

Technical properties

Color in uncured condition

colorless

Color in cured condition in 0.1 mm layer thickness

colorless

Color in cured condition in 1 mm layer thickness

colorless

Parameters

Density
Liquid

1.1 g/cm³

Viscosity
Based on DIN EN 12092 | Liquid | Viscosimeter

90000 mPa·s

Compression shear strength	8	MPa
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DELO Standard 5 | Glass | PMMA | 60 mW/cm² | 60 s

Compression shear strength	25	MPa
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DELO Standard 5 | Glass | Al | 60 mW/cm² | 60 mW/cm²

Compression shear strength	28	MPa
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DELO Standard 5 | Glass | Stainless steel | 60 mW/cm² | 60 s

Compression shear strength	25	MPa
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DELO Standard 5 | Glass | Glass | 60 mW/cm² | 60 s

Compression shear strength	18	MPa
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DELO Standard 5 | Glass | PC | 60 mW/cm² | 60 s

Compression shear strength	14	MPa
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DELO Standard 5 | PC | Al | 60 mW/cm² | 60 s

Compression shear strength	28	MPa
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DELO Standard 5 | PC | PC | 60 mW/cm² | 60 s

Compression shear strength	12	MPa
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DELO Standard 5 | PMMA | PMMA | 60 mW/cm² | 60 s

Tensile strength	20	MPa
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Based on DIN EN ISO 527 | 60 mW/cm² | 90 s

Elongation at tear	150	%
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Based on DIN EN ISO 527 | 60 mW/cm² | 90 s

Young's modulus	900	MPa
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DMTA | 400 nm | 200 mW/cm² | 60 s

Shore hardness D	63	
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Based on DIN EN ISO 868 | 60 mW/cm² | 90 s

Glass transition temperature	100	°C
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DMTA | 400 nm | 200 mW/cm² | 60 s

Shrinkage	7.5	vol. %
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DELO Standard 13 | 400 nm | 200 mW/cm² | 60 s

Water absorption	1	wt. %
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*Based on DIN EN ISO 62 | 60 mW/cm² | 90 s | Type of storage: Media | Medium: Distilled water |
Temp.: 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. Increasing or decreasing the curing temperature and / or irradiation intensity and / or irradiation intensity 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. Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent. All products provided by DELO are subject to DELO's General Terms of Business. Verbal ancillary agreements are deemed not to exist.

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

Nothing contained in this Technical Datasheet shall be interpreted as any express warranty or guarantee. This Technical Datasheet is for reference only and does not constitute a product specification. Please ask our responsible Sales Engineer for the applicable product specification which includes defined ranges. DELO is neither liable for any values and content of this Technical Datasheet nor for oral or written recommendations

regarding the use, unless otherwise agreed in writing. This limitation of liability is not applicable for damages resulting from intent, gross negligence or culpable breach of cardinal obligations, nor shall it apply in case of death or personal injury or in case of liability under any applicable compulsory law.

CONTACT

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ADHESIVES

DISPENSING

CURING

CONSULTING

DELO