

DELO-PHOTOBOND® SD4196

UV- and light curing acrylate adhesive, high viscosity

Base

- modified acrylate
- one-component, solvent-free, thixotropic

Use

- especially for peel-resistant plastic bondings, e. g., bonding of membrane foils into loudspeaker baskets or bonding of coils to membranes
- dry surface
- the cured product is normally used in a temperature range of -40 °C to +130 °C; depending on the application, other limits may be more reasonable
- compliant with RoHS directive 2015/863/EU

Processing

- supplied ready for use
- the surfaces to be bonded must be dry as well as free of dust, grease and other contaminations
- use DELOTHEN EP cleaner for the cleaning of glass
- dispensing valves and product-bearing elements must be carefully cleaned before use, residues of other products must be completely removed; 1.3-Dioxolane is recommended to remove DELO-PHOTOBOND SD4196 residues
- for further information please refer to the instructions for use

Curing

- with UV light or visible light in a wavelength range of 320 - 450 nm
- due to the color, only layer thicknesses up to a maximum of 1,5mm can be cured

Curing parameters

- dependent on material thickness and absorption, adhesive layer thickness, lamp type and distance between lamp and adhesive layer

Technical data

Color

cured in a layer thickness of approx. 0.1 mm

blue fluorescent

Density [g/cm³]

at room temperature (approx. 23 °C)

1.14

Viscosity [mPas]

at 23 °C, Brookfield rpm 7/5

47000

Minimal curing time [s]

DELO Standard 23, LED 400nm, intensity: 200 mW/cm², DELOLUXcontrol

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Surface after curing

dry

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Compression shear strength glass/glass [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	6
Compression shear strength glass/Al [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	6
Compression shear strength glass/VA [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	6
Compression shear strength glass/PA [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	5
Compression shear strength glass/PBT [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	3
Compression shear strength glass/FR4 [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	5
<i>Compression shear strength PC/PC</i> [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	11
Compression shear strength PMMA/PMMA [MPa] DELO Standard 5 LED intensity: 200 mW/cm ² , DELOLUXcontrol, irradiation time: 60 s	6
Peel resistance [N/cm] DELO Standard 34; PEEK/PEEK foil	12
Peel resistance [N/cm] DELO Standard 34; PAR/PAR foil	17
Peel resistance [N/cm] DELO Standard 34; PET/PET foil	12
Peel resistance [N/cm] DELO Standard 34; PEN/PEN foil	16
Peel resistance [N/cm] DELO Standard 34; PEI/PEI foil	16
Tensile strength [MPa] DIN EN ISO 527	3
Elongation at tear [%] DIN EN ISO 527	340
Young's modulus [MPa] DIN EN ISO 527	<100
Glass transition temperature [°C] rheometer	44
Shore hardness A DIN 53505	68
Shore hardness D DIN 53505	13
Water absorption [weight %] DIN EN ISO 62	1.4
Volume shrinkage [vol. %] DELO Standard 13	6.4

Storage life

at room temperature (+18 °C to +25 °C) in unopened original container

6 months

Instructions and advice

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 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 behavior of the product compared to its behavior under laboratory conditions. The data and information provided are therefore no guarantee for specific product properties or the suitability of the product for the intended 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 DELOs' General Terms of Business. Verbal side agreements are not permitted. This document is subject to change.

Instructions for use

The instructions for use of DELO-PHOTOBOND are available on: www.DELO.de. We will be pleased to send them to you on demand.

Occupational health and safety

see material safety data sheet

Specification

The properties in italics are part of the specification. Ranges with clear limits are defined for them and others, where applicable. In the course of the QA test, each batch is tested for these properties and the maintenance of the limits is ensured. The measuring methods used can deviate from those specified in the data sheet. Details can be found in the QA test report.