

# DELO DUALBOND LT2216

**modified epoxy resin | 1C | light-fixable / heat-curing**

free of solvents | filled | light-fixable

## Special features of product

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

## Typical area of use

- -40 - 150 °C

## Curing

Suitable lamp types LED 365 nm, LED 400 nm

Recommended light fixation time

*intensity 100 mW/cm<sup>2</sup>  
LED 400 nm* 5 s

Recommended curing time

*at +60 °C  
in air convection oven* 90 min

*at +80 °C  
in air convection oven* 30 min

*at +90 °C  
in air convection oven* 15 min

## Processing

Adhesive application jettable, needle-dispensable

Conditioning time (typical)

*stored at -18 °C  
in containers up to 10 ml* 0.5 h

Processing time

*in standard climate +23 °C / 50 % r. h.* 48 h

Storage life in unopened original container

*up to <= 55 ml  
at -18 °C* 6 month(s)

**Technical properties**

Color in uncured condition	beige	
Filler particle type	minerals	
Filler particle size	d98 = 15 µm	
Filler content	35	wt. %

**Parameters**

Density <i>DELO Standard 13   Liquid</i>	1.64	g/cm <sup>3</sup>
Viscosity <i>Liquid   Rheometer   Shear rate: 10 1/s   Gap: 100 µm</i>	14000	mPa·s
Compression shear strength <i>DELO Standard 5   ABS   ABS   60 °C   90 min</i>	23	MPa
Compression shear strength <i>DELO Standard 5   FR4   FR4   60 °C   90 min</i>	30	MPa
Compression shear strength <i>DELO Standard 5   LCP E130i   LCP E130i   60 °C   90 min</i>	12	MPa
Tensile strength <i>Based on DIN EN ISO 527   60 °C   90 min</i>	26	MPa
Elongation at tear <i>Based on DIN EN ISO 527   60 °C   90 min</i>	13.5	%
Young's modulus <i>Based on DIN EN ISO 527   60 °C   90 min</i>	1900	MPa
Glass transition temperature <i>DMTA   60 °C   90 min</i>	38	°C
Coefficient of linear expansion <i>DELO Standard 26   TMA   Evaluation T: -30 °C - 25 °C   60 °C   90 min</i>	48	ppm/K
Coefficient of linear expansion <i>DELO Standard 26   TMA   Evaluation T: 60 °C - 120 °C   60 °C   90 min</i>	150	ppm/K

Shrinkage 4.9 vol. %  
*DELO Standard 13 | 60 °C | 90 min*

Water absorption 0.12 wt. %  
*Based on DIN EN ISO 62 | 60 °C | 90 min | 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. The heating time of the components must be added to the actual curing time. It depends on component size and oven type. The specified curing temperature must be reached directly at the adhesive. Increasing or decreasing the curing temperature and / or irradiation intensity shortens or prolongs the curing time and can lead to changed physical properties. Depending on the adhesive quantity used, exothermic reaction heat is generated which can lead to overheating. In this case, a lower curing temperature is to be selected. All curing or light fixation parameters depend on material thickness and absorption, adhesive layer thickness, lamp type and distance between lamp and adhesive layer. Prefixation is performed with light. Heat curing is mandatory. 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](http://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**