

DELO[®] KATIOBOND[®] DF698

modified epoxy resin | 1C | UV-curing

free of solvents | filled, thixotropic

Special features of product

- compliant with RoHS Directive 2015/863/EU
- halogen-free according to IEC 61249-2-21
- passes ANSI/UL 94 HB Flame Test

Function

- Dam for Dam&Fill

Curing

Suitable lamp types LED 365 nm, UVA

Recommended irradiation time

intensity 55 - 60 mW/cm² 60 s
UVA

Processing

Adhesive application needle-dispensable

Conditioning time (typical)

in containers up to 600 ml 5 h

in containers up to 900 ml 6 h

Storage life in unopened original container

at 0 °C to +10 °C 6 month(s)

Technical properties

Color in cured condition in 0.1 mm layer thickness gray

Transparency in cured condition in 0.1 mm layer thickness transparent

Filler content 43 wt. %

Parameters

Density <i>DELO Standard 13 Liquid</i>	1.4	g/cm ³
Viscosity <i>Based on DIN 54453 Liquid Viscosimeter</i>	180000	mPa·s
Thixotropy index <i>Liquid</i>	5	
Minimum irradiation time <i>DELO Standard 37 DSC 60 mW/cm²</i>	15	s
Compression shear strength <i>DELO Standard 5 Glass AI 60 mW/cm² 60 s Plus 24 h</i>	12	MPa
Compression shear strength <i>DELO Standard 5 Glass PC 60 mW/cm² 60 s Plus at approx. +23 °C 24 h</i>	12	MPa
Compression shear strength <i>DELO Standard 5 Glass Glass 60 mW/cm² 60 s Plus 24 h</i>	20	MPa
Compression shear strength <i>DELO Standard 5 Glass FR4 60 mW/cm² 60 s Plus 24 h</i>	20	MPa
Tensile strength <i>Based on DIN EN ISO 527 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	22	MPa
Elongation at tear <i>Based on DIN EN ISO 527 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	20	%
Young's modulus <i>Based on DIN EN ISO 527 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	160	MPa
Shore hardness D <i>Based on DIN EN ISO 868 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	61	
Coefficient of linear expansion <i>Liquid TMA Evaluation T: 30 °C - 150 °C</i>	147	ppm/K
Water absorption <i>Based on DIN EN ISO 62 60 mW/cm² 120 s Plus at approx. +23 °C 24 h Type of storage: Desiccator Duration: 72 h</i>	0.4	wt. %

Decomposition temperature <i>DELO Standard 36</i>	298	°C
Extractable fluoride ions <i>Liquid</i>	≤100	ppm
Extractable chloride ions <i>Liquid</i>	≤10	ppm
Extractable potassium ions <i>Liquid</i>	≤10	ppm
Extractable sodium ions <i>Liquid</i>	≤10	ppm
Apparent thermal conductivity <i>60 mW/cm² 60 s</i>	0.38	W/(m·K)
Specific heat capacity <i>60 mW/cm² 60 s</i>	1.35	J/g·K
Volume resistivity <i>Based on VDE 0303-3 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	>1xE13	Ohm·cm
Surface resistance <i>Based on VDE 0303-3 60 mW/cm² 120 s Plus at approx. +23 °C 24 h</i>	>1xE12	Ohm
Relative permittivity <i>Based on RF-IV Liquid 1 MHz</i>	3.6	
Relative permittivity <i>Based on RF-IV Liquid 100 MHz</i>	3.4	
Relative permittivity <i>Based on RF-IV Liquid 10 MHz</i>	3.6	
Relative permittivity <i>Based on RF-IV Liquid 1 GHz</i>	3.3	

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.

Curing until final strength proceeds within 24 hours at room temperature.

High temperatures during or after curing can lead to post-crosslinking of the adhesive which influences the physical properties of the bond.

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

DELO KATIOBOND DF698 | as of 17.03.2020 08:52 | Page 4 of 4

DELO Industrial Adhesives
Headquarters

► Germany · Windach / Munich ... www.DELO-adhesives.com

ADHESIVES

DISPENSING

CURING

CONSULTING

DELO