



TECHNICAL INFORMATION

BEST-MK 4825

BEST-MK 4825 is a one-component, solvent free, high strength anaerobic- and light- curing adhesive based on di-methacrylate-ester. In addition to the anaerobic curing method the product can also be cured very fast by exposure to light with a wave length of 320 to 550 nm.

BEST-MK 4825 is especially suitable for serial production and for applications recommending fixture time of only a few seconds. It is also recommended for fastening of coaxial adherends, e. g. bushings, bearings and shaft-hub-connections, sealing of gap sizes up to 0,2 mm in metal components and securing and sealing of threaded connections with a thread size up to M20. In these applications excess adhesive can be cured by exposure to UV-light within seconds. Partial cure is reached instantly and allows fixing of the components and a production process without any delay for curing time. The product is especially recommended for bonding of metal with glass, glass with rubber, glass with ceramics and glass with glass. Expose the bonding surface through the glass-component. The adhesive not exposed to the light source cures anaerobically.

BEST-MK 4825 combines high strength with very good chemical resistance. Due to its high strength disassembly of threaded connections might not be possible without causing damage to screws or thread. The low viscosity allows a good distribution of the product on the adherends. Due to the capillary action it seeps into craps and gaps.

PROPERTIES (liquid product)

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| Chemical type | Di-methacrylate-ester |
| Curing system | Anaerobic/light curing |
| Appearance | Yellowish to brownish/clear |
| Strength class | High |
| Viscosity (Brookfield) | 500 mPa·s |
| Thread size | up to M20 |
| Density (DIN 51757) | 1,1 x 10 ³ kg/m ³ |
| Max. gap filling | 0,05 – 0,2 mm |
| Thread friction | 0,17 |
| Shelf life (Storage in unopened original container at 10°C up to 23°C) | 12 months |



Curing time @23°C

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|---------------------------------|-----------------|
| Fixture time (anaerobic curing) | 5 to 15 minutes |
| Fixture time (light curing) | 20 – 40 seconds |
| Functional strength | 3 – 5 hours |

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|----------------|----------|
| Final strength | 10 hours |
|----------------|----------|

STRENGTH VALUES (cured product)

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| Compression shear strength (DIN 54452) | 25 N/mm ² |
| Breakloosemoment (DIN 54454) | 28 Nm |
| Breakawaymoment (DIN 54454) | 30 Nm |

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|---------------------------------|----------------|
| <u>TEMPERATURE RANGE</u> | -60°C – +150°C |
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CHEMICAL AND ENVIRONMENTAL RESISTANCE
(DIN 53287 – Test in accordance with DIN 54454)

in % of the initial strength after 1000h chemical absorption

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|-----------------------------------|------|
| Water/Glycol at 87°C | 95 % |
| Motor oil (MIL-L-46 152) at 125°C | 100% |
| Unleaded Gasoline at 23°C | 90 |
| Brake fluid at 23°C | 90% |
| 1,1,1 trichlorethane at 23°C | 90% |
| Ethanol at 23°C | 95% |
| Acetone at 23°C | 90% |

For more information on resistance against other chemicals please contact BEST-Klebstoffe.

HEALTH AND SAFETY STANDARDS

Warning! Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. For further information please see corresponding material safety data sheets.

General

The data and information above correspond to the current know-how of BEST-Klebstoffe GmbH & Co.KG. Our information and data have been developed from laboratory tests and extensive practical experience. It is the user's responsibility to perform receiving inspections and to determine suitability for the user's purpose of any production methods. We disclaim all warranties expressed or implied, that any product will have specific properties for a particular purpose. BEST-Klebstoffe GmbH & Co. KG reserves the right to change the contents of this document as necessary.

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