



TECHNICAL INFORMATION

BEST-MK 4451

BEST-MK 4451 is a one-component, solvent free, high strength and high viscous anaerobically curing adhesive based on di-methacrylate-ester.

BEST-MK 4451 is especially recommended for the repair of blowholes and cracks on worn-out bearings, bushings and hub- shaft connections as well as metal threads.

BEST-MK 4451 automatically spreads in the thread without leaking from the thread. Apply product on the damaged area. Fasten the thread or assemble the joining. The adhesive cures under the exclusion of oxygen and upon contact with metal ions within 24 hours. Excess adhesive remains liquid and can be removed with a clean cloth. The cured adhesive features metallic properties and can be treated as such regarding drilling, shaping, sanding.

PROPERTIES (liquid product)

Chemical type	Di-methacrylate-ester
Curing system	Anaerobic
Appearance	Metallic-grey
Strength class	High strength
Viscosity (Brookfield)	50.000 mPas/thix
Density (DIN 51757)	1,4 x 10 ³ kg/m ³
Thread size	All threads
Thread friction	0,3
Shelf life (Storage in unopened original container at 10°C up to 23°C)	12 months
<u>Curing time @23°C</u>	
Fixture time	3 – 10 minutes
Functional strength	4 – 6 hours
Final strength	24 hours



STRENGTH VALUES (cured product)

Compression shear strength (DIN 54452)	22 N/mm ²
Breakloosemoment (DIN 54454)	28 Nm
Breakawaymoment (DIN 54454)	32 NM

TEMPERATURE RANGE

-60°C – +175°C

CHEMICAL AND ENVIRONMENTAL RESISTANCE
(DIN 53287 – Test in accordance with DIN 54454)

in % of the initial strength after 1000h chemical absorption

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

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

HEALTH AND SAFETY STANDARDS

Warning! Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. 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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