

TECHNICAL INFORMATION

BEST-MK 1312

BEST-MK 1312 is a one component, solvent free, high strength and capillary anaerobic curing adhesive based on Dimethacrylate ester. The viscosity is low.

BEST-MK 1312 is especially recommended for bonding of coaxial parts like bushings and bearings and for sealing of cast iron parts as well as securing and sealing of threaded joints. Also recommended for subsequent bonding and securing of thread connections and repairs of hairline cracks in metal casings.

BEST-MK 1312 combines high strength with excellent chemical resistance. The “break loose” moment is very high. Therefore in case of disassembly of thread connections it is possible that the screw can break or the thread is damaged. The low viscosity provides a good capillary action which supports a good distribution of the adhesive on the bonding surfaces. The adhesive is especially recommended for later application. Due to the low viscosity the adhesive fills in gaps and very fine hairline cracks and cures in place.

PROPERTIES (liquid product)

Chemical Type	Dimethacrylate ester
Curing system	anaerobic
Colour	green
Strength	high
Viscosity (Brookfield 25 °C) Sp. 1/30 U/Min	10 - 20 mPas
Density (DIN EN 542)	1,1 x 10 ³ kg/m ³
Thread sizes	
- when applying before screwing together	to M5
- when applying after screwing together	all thread sizes
Bonding gap	0,01 – 0,05 mm
Thread friction	0,17
<u>Shelf life in unopened original container</u> (Storage temperature 8 to 21°C)	24 months
<u>Shelf life in unopened original container BULK</u> (Storage temperature 8 to 16°C)	3 months

CURING TIME @23°C

Fixture time	2 - 10 min.
Functional strength	2 - 4 hrs.
Total curing time	8 hrs.



STRENGTH VALUES (cured product)

Compression/shear strength (DIN 15337)	25 N/mm ²
Breakloose Moment (DIN EN 15865)	35 Nm
Breakaway Moment (DIN EN 15865)	45 Nm
Temperature range	-60°C up to +150°C

CHEMICAL/SOLVENT RESISTANCE (DIN 53287 - test in accordance to DIN 15865)

in % of the initial strength after 1000h chemical absorption

Water/Glycol at 87°C	90%
Motor Oil (MIL-L-46 152) at 125°C	100%
Unleaded Gasoline at 23°C	95%
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 resistance against other chemicals, please check the chemical resistance listing.

INDUSTRIAL HEALTH AND SAFETY STANDARDS

Hazard Statements: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. 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. They shall not release any customer from its duty to perform receiving inspections and to do test runs in view of any intended use, nor do they constitute a representation that any product will have specific properties or be suitable for any definite use. BEST-Klebstoffe GmbH & Co. KG reserves the right to change the contents of this document as necessary.

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