

TECHNICAL INFORMATION

BEST-MK 4451

BEST-MK 4433 is a one-component, solvent free, super strength and high viscous anaerobically curing structural adhesive based on di-methacrylate-ester.

BEST-MK 4433 is especially recommended for mending of blowholes and rifts with worn out bearings, bushings and shaft/hub- connections such as metal pipe threads.

BEST-MK 4433 automatically spreads in the thread without leaking from the thread combines. The adhesive is applied on damaged area. Subsequently thread is screwed or rather plug-connection assembled. The adhesive cures through metal contact and exclusion of oxygen in the joint within 24 hours. Consisting adhesive stays liquid through air contact and can be wiped off with a clean cloth. The cured product has metal properties can be worked through drilling, milling and grinding like metals.

PROPERTIES (liquid product)

Chemical Type	Dimethacrylate ester
Curing system	anaerobic
Color	Metallic-grey
Strength	super high
Viscosity (Brookfield) Sp.4/100 RPM	400.000 – 800.000 mPas
Density (DIN EN 542)	1,1 x 10 ³ kg/m ³
Thread sizes	all threads
Thread friction	0,3
<u>Shelf life in unopened original container</u> (Storage temperature at 10 to 23°C)	2 Years
<u>Shelf life in unopened original BULK</u> (Storage temperature at 8 to 16°C)	3 months

CURING TIME @ 23°C

Fixture time	3 - 10 min.
Functional strength	4 - 6 hrs.
Total curing time	24 hrs.

STRENGTH VALUES (cured product)

Compression/shear strength (DIN EN 15337)	22 N/mm ²
Breakloose Moment (DIN EN 15865)	28 Nm
Breakaway Moment (DIN EN 15865)	32 Nm
Temperature range	-60°C to +175°C

ENVIRONMENTAL AND CHEMICAL RESISTANCE

(DIN 53287 - test in accordance to DIN EN 15865)
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 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 irritation. May cause respiratory irritation. General rules regarding handling of chemicals apply. 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 were 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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