

TECHNICAL INFORMATION

BEST-MK 2241
(liquid Teflon®)

BEST-MK 2241 is a one-component, solvent-free, medium strength and high viscous anaerobically curing adhesive based on PTFE. It is also described as liquid Teflon®.

BEST-MK 2241 is especially designed for securing and sealing of metal screw connections. It is also recommended for securing and sealing of metal thread connections.

BEST-MK 2241 replaces hemp and Teflon tape for sealing metal screw connections. The sealing agent has a lubricating action. Low effort is necessary for assembly/disassembly.

BEST-MK 2241 automatically spreads in the thread without leaking from the thread. Disassembly is possible with special tools without causing damage to the thread.

PROPERTIES (liquid product)

Chemical type	PTFE, Di-methacrylate-ester
Curing system	Anaerobic
Appearance	White
Strength class	medium
Viscosity (Brookfield)	40.000 - 60.000 mPas/thix
Density (DIN EN 542)	1,1 x 10 ³ kg/m ³
Thread size up to	R3"
Max. gap filling	0,1 – 0,25 mm
Thread friction	0,17
<u>Shelf life in unopened original container</u> (Storage temperature at 10°C to 23°C)	24 months
<u>Shelf life in unopened original BULK</u> (Storage temperature at 8 to 16°C)	3 months

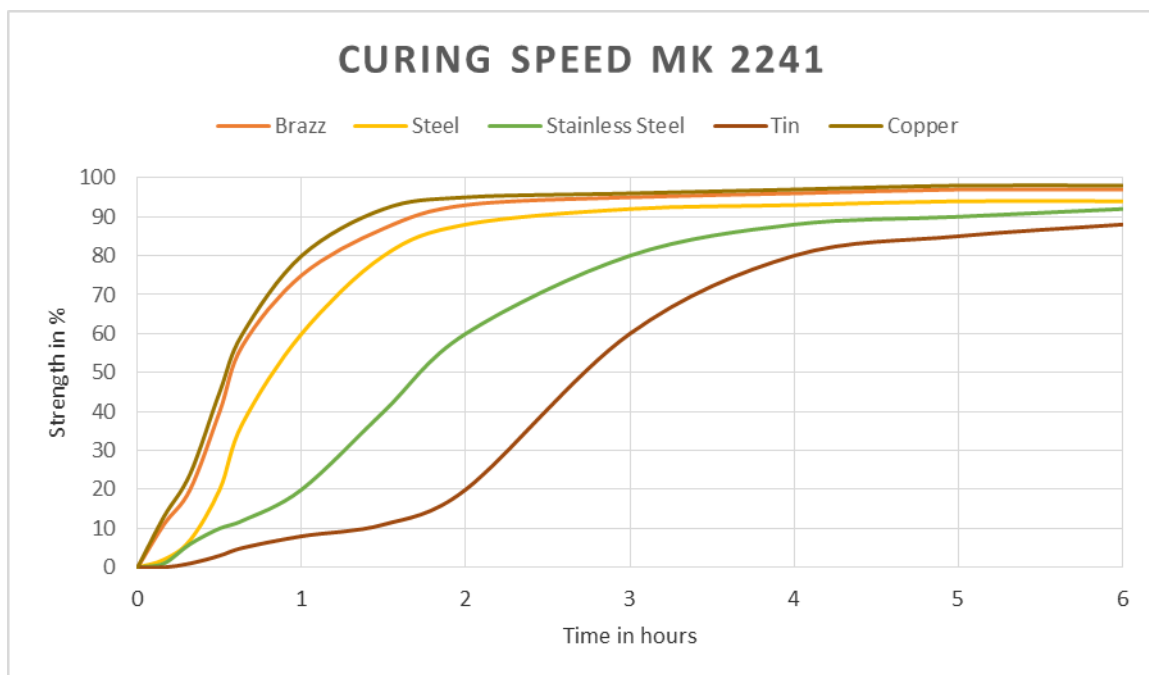
Typical Curing Properties

Curing speed depending on the material

The curing process is initiated by the contact of the adhesive with metal surfaces which act as a catalyst. A distinction is generally made between active and passive surfaces. Curing on passive surfaces is much slower than on active surfaces.

Active surfaces are, for example, steel, brass, bronze, copper and iron. Passive surfaces are, for example, high-alloyed steels, nickel, tin, silver, gold, oxide layers, chromate layers, anodic coatings.

Testing was carried out in accordance with DIN EN 15865 without preload.



Shear strength depending of gap width

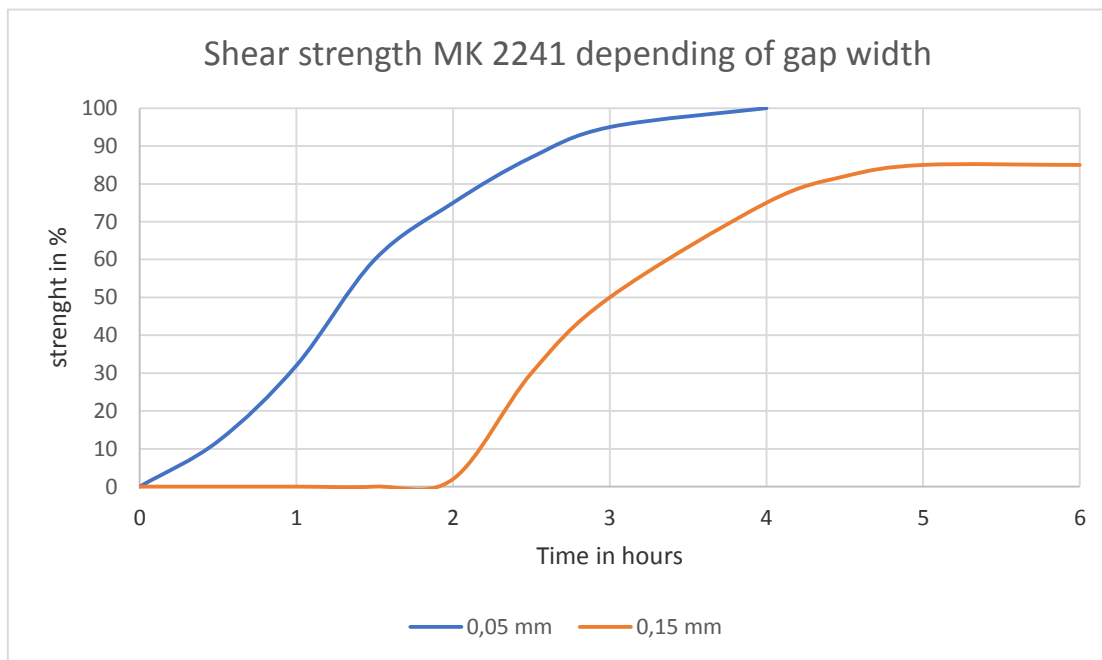
How quickly an adhesive cures depends on the bonding gap as well. Gaps in screw joints depend on thread type and size. The following diagram shows the temporal development of the shear strength on shafts and hubs made of steel with different gaps.

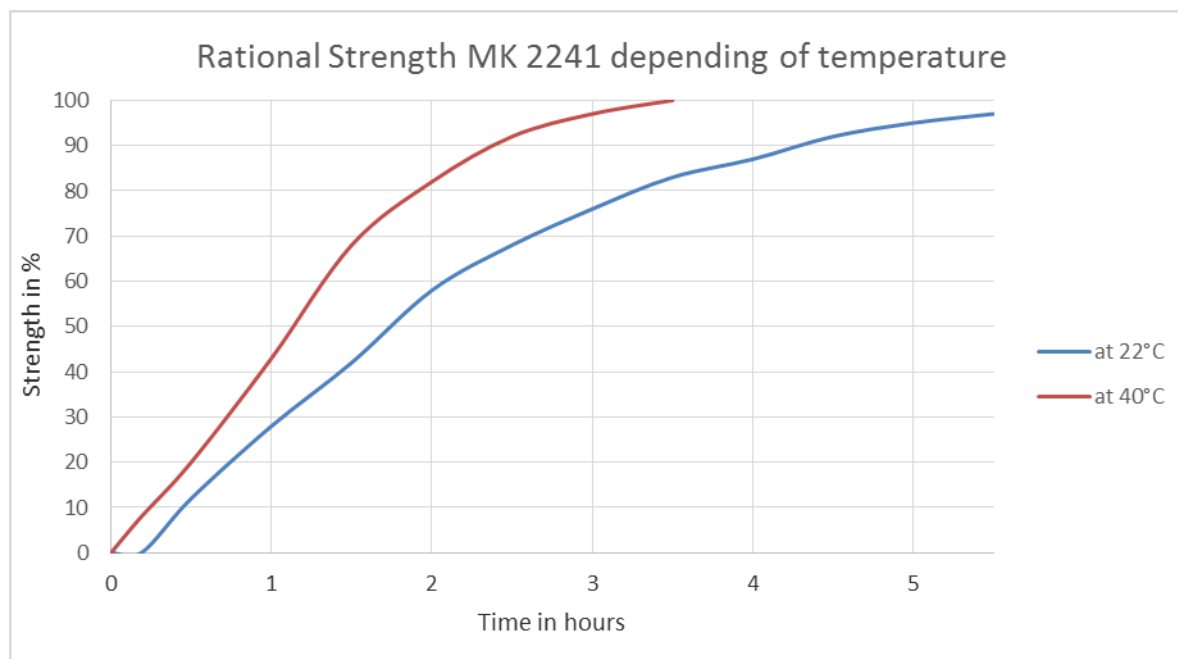
Testing was carried out in accordance with DIN EN 15337.

Rotational strength depending of temperature

The diagram below shows the time evolution of the torsional strength of M10 steel screws and nuts at different temperatures.

Testing was carried out in accordance with DIN EN 15865.





STRENGTH VALUES (cured product)

Compression shear strength (DIN EN 15337)	16 N/mm ²
Breakloosemoment (DIN EN 15865)	14 Nm
Breakawaymoment (DIN EN 15865)	< M-LB

CHEMICAL AND ENVIRONMENTAL RESISTANCE

(DIN 53287 – Test in accordance with DIN EN 15865)

in % of the initial strength after 1000h chemical absorption

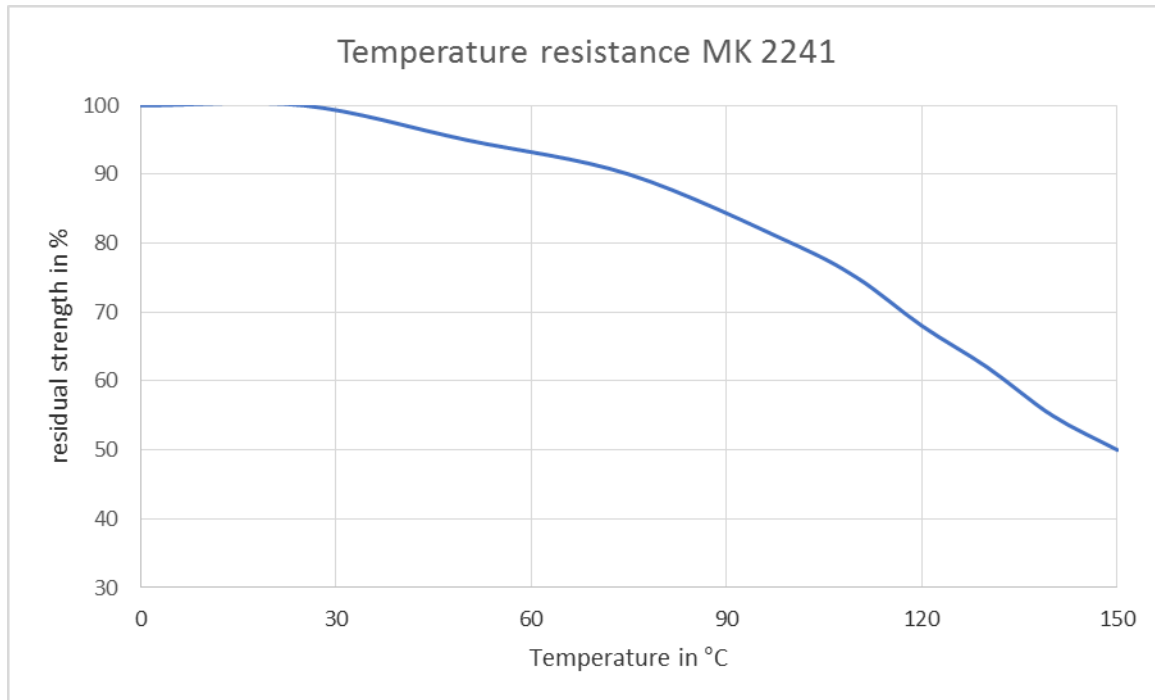
Water/Glycol at 87°C	85 %
Motor oil (MIL-L-46 152) at 125°C	95%
Unleaded Gasoline at 23°C	95%
Brake fluid at 23°C	100%
1,1,1 trichlorethane at 23°C	95%
Ethanol at 23°C	85%
Acetone at 23°C	90%

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

Temperature resistance

Temperature range of use: -60°C to +150°C

Testing was carried out in accordance with DIN EN 15865.



HEALTH AND SAFETY STANDARDS

This product is not classified as dangerous according to regulation (EC) 1272/2008. 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 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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