

TORNILOCK T-63

12/2024



Product description

Tornilock T-63 is a high strength, oil tolerant, anaerobic threadlocker. T-63 is designed for permanent locking of screws. The product works on aluminum, steel, plated screws, stainless steel and special alloys. It offers excellent temperature resistance and high solvent resistance.

Typical applications

- * Ideal for bolts and screws up to 1" (25 mm) diameter.
- * Designed for transmission and engine block bolts, valve kits, etc.
- * High strength, permanent and eliminates the need for double threading and welding. Prevents corrosion and leakage.
- * Bolts on vibrating machines or moving components.
- * Meets military specifications:
 - » MIL-S-46163A Type I Grade K.
 - » MIL-S-22473E Letter Grade CVV.

Application Method

Although this threadlocker is oil-tolerant, for optimal performance, it is recommended to clean and dry the parts to minimize the amount of oil and grease on the surface before applying the product.

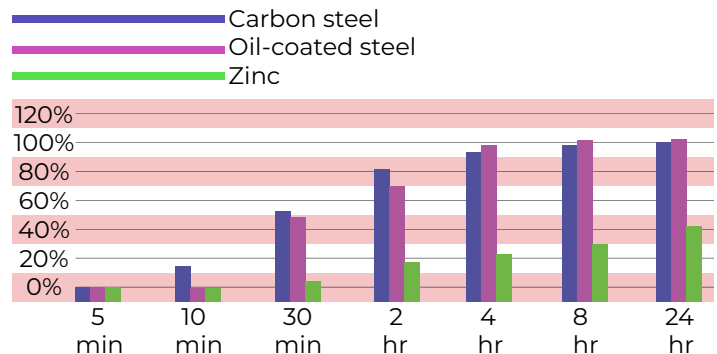
Chemical resistance

(shear strength values after 1000 hours)

Chemical	Temp	500 hours	1000 hours
Acetone	71.6 °F	95%	90%
Ethanol	71.6 °F	100%	100%
Motor Oil	257 °F	95%	95%
Gasoline	71.6 °F	100%	100%
Brake Fluid	71.6 °F	100%	100%
Water/Glycol	188.6 °F	90%	80%

Cured performance

Curing speed varies with temperature and material. The following graph shows the breaking strength of M-10 bolts made of carbon steel, zinc plated steel and oiled steel.



Physical properties in solid state:

Property	Value
Time of handling	10 minutes
Working time	1 - 3 hours
Full Cure Time	24 hours
Breakaway Torque, ISO 10964 (M10 carbon steel bolt)	28 lbf/in
Prevail Torque, ISO 10964 (M10 carbon steel bolt)	31 lbf/in
Break Loose Torque, ISO 10964 (M10 carbon steel bolt)	40 lbf/in
Maximum Prevail Torque, ISO 10964 (M10 carbon steel bolt)	57 lbf/in
Compressive Strength	Steel pins and collars > 1,000 psi
Temperature Range	-67 °F to 302 °F

Physical properties in liquid state:

Description	Specification
Composition	Methacrylate Ester
Color	Red
Viscosity	500 cps at 77 °F (Brookfield RVT Spindle 3 to 20 rpm)
Specific Gravity	1.11
Maximum Thread Diameter	M24 / 1"
Gap Filling	0.07 mm
Flash Point	> 212 °F
Solvent Content	None
Shelf life of unused product	2 years
Coefficient of Thermal Expansion	80×10 ⁻⁶ ASTM D 696, K-1
Coefficient of Thermal Conductivity	0.10 ASTM C 177,W/(m·K)
Specific Heat, kJ/(kg·K)	0.30

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Storage

Anaerobic adhesives should be stored in a cool, dry place in unopened containers at room temperature between 46°F and 82°F. Do not return unused material to its original container.

Precautions

This product and auxiliary materials may cause adverse health effects. Please refer to the Safety Data Sheets (SDS) for more details.

Note. The data is provided for information purposes only and is based on studies carried out. The data shown here was obtained by following the application instructions and under optimal product conditions. We cannot assume responsibility for the results obtained by others whose methods we do not control. It is recommended that the product be tested in the application for which it is to be used.

For more information about this or any other product, please contact our technical department at contacto@tornilock.com. It is important to properly follow the instructions for use specified on the label.

