

### RED HIGH-STRENGTH BOLTLOCKER HIGH VISCOSITY PART NO. 45454

#### DESCRIPTION

*Dynatex® Red Hi Strength Boltlocker* is a single component, high viscosity anaerobic thread-locking adhesive, which is thixotropic and develops high strength. The product cures between close fitting metal parts where there is an absence of air.

#### TYPICAL APPLICATIONS

Prevents loosening and leaking of threaded fasteners. *Dynatex® Red Hi Strength Boltlocker* is suitable for large assemblies and heavy-duty applications where high levels of shock, vibration and stress are present.

#### PHYSICAL PROPERTIES

##### Monomer (Liquid)

Base Compound .....	Dimethacrylate Ester
Color .....	Red
Viscosity (cP @ 68°F) .....	7000 cP
Flash Point (TCC) .....	Above 200°F
Gap Fill .....	.016"
Corrosivity .....	None
Toxicity .....	Low
Specific Gravity (g/cc) .....	1.1
Shelf Life @ 40°F .....	1 year unopened
Military Specifications .....	Mil-S-46163A Type II Grade K
Curing Properties .....	Depend on environmental conditions and the substrates used.

##### Polymer (Cured)

Locking Strength .....	High
Service Temperature Range .....	-75°F to 400°F
Appearance .....	Red solid
Shear Strength (steel nuts and bolts) .....	3,000 psi
Full Cure Time .....	24 hours

#### CURING PERFORMANCE

The gap of the bond line will affect set speed. Smaller gaps tend to increase the speed. Activators can be applied to improve set speed but may also impair overall adhesive performance.

**SETTING TIME (68°F, 65% R.H.)**

<b>Substrate</b>	<b>Set time/Full cure</b>
Steel	25-min/24 hrs
Brass	45-min/24 hrs
Zn Dichromate	55-min/24 hrs
Stainless Steel	60-min/24 hrs

**PERFORMANCE OF CURED MATERIALS**

Bond strength after 24 hours at 20°C to 25°C on steel nuts and bolts.

	<b>Average Value</b>	<b>Range</b>
Breakaway Torque	255 in. lbs.	160-340 in. lbs.
Prevailing Torque	260 in. lbs.	190-330 in. lbs.

**CHEMICAL RESISTANCE**

Sheer strength on steel after 500 hours.

<b>Solvent</b>	<b>% Strength Retained</b>
Motor Oil	90
Unleaded Gasoline	100
Trichloroethane	90
Brake Fluid	100
Ethanol	90
Acetone	95
Water/Glycol Mix	95

**GENERAL INSTRUCTIONS**

Surfaces to be bonded should be clean and dry and free of grease.

Product should be applied in enough quantity to fill all engaged threads. The product performs best in thin bond gaps. Very large gaps may create gaps, which will affect the cure speed and overall strength. Good contact is essential. An adequate bond develops in 15 to 45 minutes and maximum strength is attained in 24 hours.

**This product is not recommended for use in pure oxygen environments and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

This product is not designed for plastics, particularly thermoplastics where stress cracking of the plastic could result. It is recommended to confirm compatibility of the product with all substrates prior to use.

**STORAGE**

Products should be stored unopened in a cool, dry place out of direct sunlight.

**USERS PLEASE READ**

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**Dynatex**<sup>®</sup> *A division of Accumetric, LLC*

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