

### RED HIGH STRENGTH BOLTLOCKER HIGH VISCOSITY PART NO. 49450

#### PHYSICAL PROPERTIES

##### Monomer (Liquid)

Base Compound ..... Dimethacrylate Ester  
Color..... Red  
Viscosity (cP @ 68°F) ..... 2500 cP  
Flash Point (TCC)..... >200°F  
Gap Fill ..... .010"  
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 O

Curing Properties ..... Depends on environmental conditions and the substrates used

##### Polymer (Cured)

Locking Strength ..... Medium  
Service Temperature Range ..... -75°F to 300°F  
Appearance ..... Red liquid  
Shear Strength (steel nuts and bolts) ..... 3000 psi  
Full Cure Time ..... 24 hours



#### DESCRIPTION

*Dynatex® Red High Strength Boltlocker* is a single component, anaerobic liquid which cures when confined in the absence of air between close fitting metal surfaces. *Dynatex® Red High Strength Boltlocker* is a high strength anaerobic threadlocking material that cures between engaged threads to form a unitized assembly that resists virtually all leakage, shock and vibration. Ideal for all ¼ inch to ¾ inch diameter nut and bolt assemblies where future disassembly is improbable. Provides a positive seal that resists most fluids. Prevents nuts, bolts and other fasteners from loosening due to vibration. Works in temperatures from -65°F to 350°F (-54°C to 177°C). Fixture tight in minutes. Protects against thread corrosion.

#### FEATURES

- Eliminates vibration issues
- Cures without cracking or shrinking
- Prevents rusting of threads
- Seals against leakage
- No mixing
- No curing outside of joint

#### TYPICAL APPLICATIONS

- Shock absorber bolts
- Frame bolts
- Cylinder block
- Rocker arm studs
- Ring gear bolts
- Fan hub bolts

## SETTING TIME (68°F, 65% R.H.)

Substrate	Set time/Full cure
Steel	15 min/24 hrs
Brass	30 min/24 hrs
Zn Dichromate	25 min/24 hrs
Stainless Steel	35 min/24 hrs

## CHEMICAL RESISTANCE

Shear strength on steel after 500 hours.

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

## PERFORMANCE OF CURED MATERIALS

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

	Average Value	Range
Breakaway Torque	190 in. lbs.	130-250 in. lbs.
Prevailing Torque	230 in. lbs.	140-275 in. lbs.

## 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 AND SHELF LIFE

When stored in the original unopened containers at or below 90°F (32°C), *Dynatex® Red High Strength Boltlocker* has a shelf life of 12 months from date of shipment.

In Countries where high heat and humidity are a factor, special precautions must be taken. Store product in a covered, well-ventilated warehouse and avoid excessive heat conditions. Storage in high heat, high humidity conditions may reduce shelf life by up to 30%. Rotation of stock is an absolute necessity. Cartons should always be stacked upright. DO NOT stack cartons on their side. **NEVER** stack cartons more than 8 high. DO NOT store within 1 meter (4 feet) of roofline of the warehouse or storage building.

## USERS PLEASE READ

The information and data contained herein is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since the supplier cannot know all the uses, or the conditions of use to which these products may be exposed, no warranties concerning the fitness or suitability for a particular use or purpose are made.

It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

Likewise, if the application, product specifications or manner in which our products are used requires government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

**Non-warranty:** Because the storage, handling and application of the material is beyond Dynatex control, we can accept no liability for the results obtained. Dynatex sole limited warranty is the product meets the manufacturing specifications in effect at time of shipment. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. Dynatex will not be liable for incidental or consequential damages of any kind. The exclusive remedy for breach of such limited warranty is a refund of purchase price or replacement of any product shown to be other than as warranted. Suggestions of uses should not be taken as inducements to infringe any patents.

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