

LT HIGH STRENGTH RED THREADLOCKER

PART NO. **AT160**

DESCRIPTION

AT160 is a single-component, red, high-strength, threadlocking adhesive. It is designed for larger threaded fasteners up to 1" in diameter and is suitable for heavy-duty applications where high levels of shock, vibration, and stress are present. This formula is recommended in applications where permanent adhesion is needed and may require heat to be disassembled.

PHYSICAL PROPERTIES

Technology / Base	Dimethacrylate Ester
Type of Product	Adhesive and Sealant
Components	One Component
Curing	Anaerobic with Secondary Heat Cure
Appearance / Color	Red
Consistency	Liquid

TECHNICAL DATA

Property	Value	Method/Condition		
Rheology				
Viscosity	1800 +/- 600 cPs	Brookfield at 25°C, Spindle 3 @ 20 rpm		
Density				
Specific Gravity	1.10	N/A		
Uncured Materials Characteristics				
Flash Point Gap Fill Shelf Life Storage Condition	> 93°C (200°F) 0.010 inch 12 months unopened 20°C (68°F)	N/A N/A N/A N/A		
Cured Materials Characteristics				
Full Cure Conditions Cure Appearance RoHS Compliant	24 hours at 25°C Red Solid Yes	N/A N/A N/A		
Cured Mechanical Properties				
Locking Strength Breakaway Torque Prevailing Torque Service Temperature	High 125 in-lb. to No Limit 150 in-lb. to No Limit -55°C to 150°C (-65°F to 300°F)			

SPECIFICATIONS AND APPROVALS

Mil-S-46163A, Type II Grade 0; ASTM D-5363 AN 0331



INSTRUCTIONS

Surfaces to be bonded should be clean, dry and free of grease. Product should be applied in enough quantity to fill all engaged threads or gap. The product performs best in thin bond gaps. Very large gaps may create voids that will affect the cure speed and overall strength. Good contact is essential. It is recommended to confirm compatibility of the product with all substrates prior to use. This product is not recommended for use with strong oxidizing materials. Where aqueous washing systems are used to clean the surfaces before bonding, these aqueous washes can affect the cure and performance of the adhesive. This product is not normally recommended for use on plastics, users must check compatibility of the product with such substrates.

CURING PERFORMANCE

The rate of cure will depend on environmental conditions and the substrates used. The gap of the bond line will affect set speed. Smaller gaps tend to increase set speed. Activators may be applied to further improve set speed, but may also impair overall adhesive performance.

STORAGE

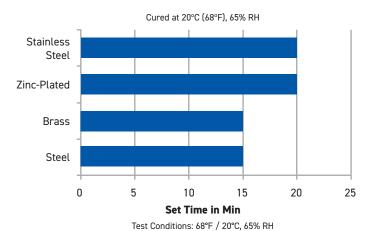
Products should be stored unopened in a cool, dry place out of direct sunlight. Products may be refrigerated for improved shelf life, but should be brought back to room temperature before use.

SAFETY & DISPOSAL

For safe handling information on this product, consult the Safety Data Sheet (SDS).



SET TIME ON VARIOUS SUBSTRATES

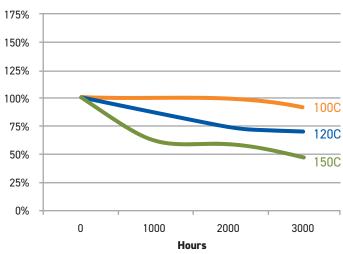


SOLVENT RESISTANCE

Solvent	Example	Resistance
Alcohol	Ethanol, methanol	Excellent
Ester (aromatic)	Ethylacetate	Poor
Ketone (aromatic)	Acetone, benzophenone	Poor
Aliphatic hydrocarbon (alkanes)	Petrol, heptanes, hexane	Good
Aromatic hydrocarbons	Benzyl, toluol, xylol	Good
Halogenated hydrocarbons	Methylenchloride, chloroform, chlorobenzol	Poor
Weak aqueous acid	Nitrite, muriatic acid, sulphuric acid, phosphoric acid	Excellent (poor if concentrated)
Weak aqueous base	Sodium hydroxide solution, caustic potash	Excellent (poor if concentrated)

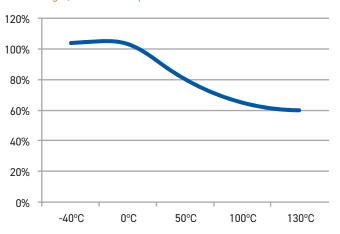
HEATING AGING

Aged at Temperature Indicated & Tested at 22°C



HOT STRENGTH

%RT Strength, Tested at Temperature



DISCLAIMER

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