

THREAD LOCK HIGH STRENGTH

ANAEROBIC THREADLOCKING ADHESIVE

PRODUCT DESCRIPTION

Thread Lock High Strength is a single-component anaerobic threadlocking adhesive that develops high strength. Thread Lock High Strength prevents loosening of threaded fasteners. Thread Lock High Strength is suitable for heavy-duty applications where high levels of shock, vibration, and stress are present.

PRODUCT BENEFITS

- Improves reliability by providing more holding power under vibration than lock screws and lock washers.
- Application Ease: No mixing (one part adhesive), wide variety of application methods designed to suit your specific needs.
- Low odor product for a safe work place, and easy clean-up after the job is completed.
- This product fully satisfies the requirements of MIL-546163A, type 1 grade K and ASTM D5363 an Q221.

PRODUCT APPLICATION



For use on threaded fasteners

PHYSICAL PROPERTIES - MONOMER (UNCURED)

Base Compound	Dimethacrylate Ester
Appearance	Red Liquid
Viscosity (Brookfield Spindle 3 @ 20 rpm, RVT, 25°C)	500 +/- 200 cps
Gap Fill	0.007"
Specific Gravity	1.1
Flash Point	>200°F (93°C)
Shelf Life	12 months unopened
Storage Condition	68°F (20°C)
RoHS-Compliant	Yes

PHYSICAL PROPERTIES - POLYMER (CURED)

Appearance	Red Solid
Locking Strength	High
Service Temp Range	-65° to 300°F (-54° to 149°C)
Full Cure Time	24 hours

THREAD LOCK HIGH STRENGTH

PERFORMANCE OF CURED ADHESIVE

	Inch-pounds	Newton Meters
Breakaway Torque	140.0 to 320.0	15.82 to 36.16
Prevailing Torque	200.0 to 440.0	22.60 to 49.71

SETTING TIME / FULL CURE TIME*

Steel	15 minutes / 24 Hours
Brass	15 minutes / 24 Hours
Zinc-Plated	20 minutes / 24 Hours
Stainless Steel	20 minutes / 24 Hours

*68°F (20°C), 65% RH

DIRECTIONS FOR USE

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 that 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.

SOLVENT RESISTANCE

Solvent	Example	Resistance
Alcohol	Ethanol, Methanol	Excellent
Ester (aromatic)	Ethylacetate	Weak
Ketone (aromatic)	Acetone, Benzophenone	Weak
Aliphatic hydrocarbon (alkanes)	Petrol, Heptanes, Hexane	Very Good
Aromatic hydrocarbons	Benzyl, Toluol, Xylol	Very Good
Halogenated hydrocarbons	Methylenchloride, Chloroform, Chlorobenzol	Weak
Weak aqueous acid	Nitrite, Muriatic acid, Sulphuric acid, Phosphoric acid	Excellent (Weak, if concentrated)
Weak aqueous base	Sodium hydroxide solution, Caustic potash	Excellent (Weak, if concentrated)

PRODUCT NUMBER

9600000372

HEALTH AND SAFETY

For health and safety guidance, please refer to the Chemtool SDS (Safety Data Sheets).