Vibra-Tite® S530 Threadlocker

February 2025

Product Description

Vibra-Tite S530 is a general purpose, anaerobic stick retaining compound used for press-fit and tight-clearance, and slip-fit metal applications. The product performs on aluminum, steel, plated, stainless steel, and special alloy parts. Vibra-Tite S530 exhibits good temperature and solvent resistant. Vibra-Tite S530 can be used where lubricity is needed to press fit parts or to create an air-tight seal on cylindrical assemblies. This product cures rapidly on all metal surfaces.

Typical Applications

- •Locks keys & splines
- •Locks bearings in place preventing spin-out
- •Bonds rotor to shaft in low horsepower motors
- Augments press fits
- •Locks bushings & sleeves in housings & on shafts
- Restores the fit to worn assemblies or out-of-tolerance parts

Properties of Uncured Material

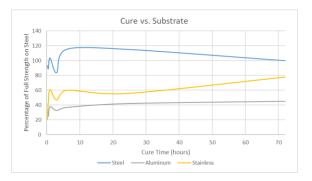
Chemical Type	Methacrylic Ester
Cure Type	Anaerobic
Secondary Cure	Activator
Percent Solids	100
Color	Green
UV Fluorescent	Yes
Application	Retaining

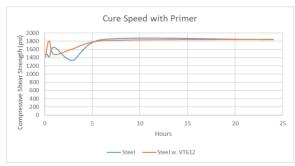
Performance of Cured Material Typical Values (Steel Pin & Collar)

	-51°C to 150°C
Operating Range	(-60°F-300°F)
Fixture Time	15-20 minutes
Ambient Strength	
24 hour cure at 23°C	
Steel pins and collars	>1500 psi
Heat Age Strength	
24 hour cure at 23°C	
2000 hours at 100°C	
Broken at 23°C	>2500 psi

Cure Speed

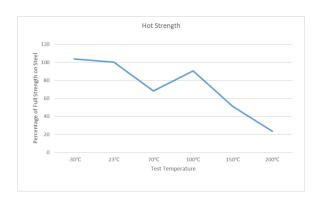
The cure speed is dependent on temperature and substrate. The graph below shows compressive shear strength on various common finishes at 25°C, using ASTM 4562. Static shear strength was measured on cylindrical parts with a 0.002" diametrical clearance.





Hot Strength

Parts were cured for 24 hours then held at temperature for two hours. Compressive shear strength values were recorded for parts at temperature, using ASTM 4562 on steel substrates.



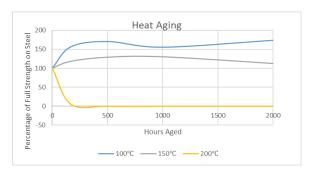


Technical Data Sheet Vibra-Tite® S530 Threadlocker

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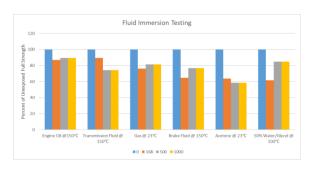
Heat Aging

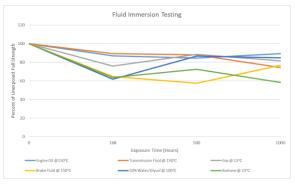
Parts were allowed to cure for 24 hours then were aged at the reported temperatures. Compressive shear strength values were recorded at room temperature using ASTM 4562 on steel substrates.



Fluids Testing

Parts were allowed to cure for 24 hours then were submerged in the listed fluid(s) at the reported temperatures. Compressive shear strength values were recorded at room temperature, using ASTM 4562 on steel substrates.





Instructions for Use

For best results, ensure parts are clean, dry and free from oil and grease. Anaerobic adhesives cure in the presence of metal and the absence of oxygen. Residual adhesive outside of the bond area will remain liquid and is not indicative of product failure. For optimal performance, allow the material to cure for at least 24 hours prior to use when possible.

Compatible Primers

Primers such as Vibra-Tite Excel 611 (Primer N) or Excel 612 (Primer T) can be used to speed the fixture time of the adhesive. Fixture times can improve by as much as 50%. The use of primers can result in lower strength and performance should be tested after full cure.

General Information

Storage

Product should be stored in a cool and dry location at temperatures between 8°C to 21°C. Shelf life is 2 years from date of manufacture when stored at 72±8°F (22±4°C). Storing above this temperature will result in a lower shelf life.

Shelf life of this product is 6 months when storing in quantities ≥ 2 liters. Refrigerate the material or download the material into smaller containers to extend the shelf life.

Note

Vibra-Tite S530 is color coded green and once cured, seals and vibration proofs the assembly, giving high compressive shear strength. The high strength of this material may require heat and/or solvent to disassemble.

Health & Safety in use

IRRITANT: Contains Methacrylate Esters which may irritate eyes, respiratory organs and skin. In case of contact with the skin, wash immediately with plenty of water.