

Product Description

Vibra-Tite 111 is a low strength, anaerobic thread locking compound. Vibra-Tite 111 is design for locking threaded fasteners that require disassembly with standard hand tools. The product performs on aluminum, steel, plated, stainless steel, and special alloy parts. Vibra-Tite 111 exhibits good temperature and solvent resistant.

Typical Applications

Vibra-Tite 111 will lock and seal small screws (less than 1/4"), set screws, and screws that have long engagement length.

Properties of Uncured Material

Chemical Type: Anaerobic Appearance: Purple Toxicity: Low Solids: 100% Viscosity @ 25°C, cP

Brookfield RVT,

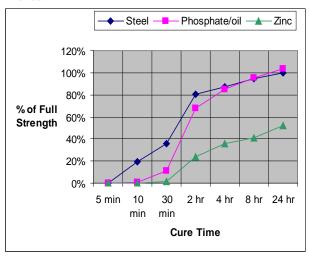
Spindle 3 @ 20 rpm: 900-1500

Specific Gravity: 1.05

Typical Curing Performance

Cure Speed

The cure speed is depended on temperature and substrate. The graph below shows the Breakaway Strength on M-10 Steel, Phosphate/oil, and Zinc finishes.



Performance of Cured Material

Typical Values

Fixture Time: 15-20 min@ 72°F Full Cure Time: 24 hrs @ 72°F

Temperature Range: -60°F to 300°F (-51°C to 150°C)

Breakaway Strength

| 3/8" Plain Steel nut and bolt @1 hr | 10-80 lb _f -in |
|--------------------------------------|----------------------------|
| 3/8" Plain Steel nut and bolt @24 hr | 50-100 lb _f -in |
| 3/8" Zinc nut and bolt @ 24 hr | 10-40 lb _f -in |

Environmental and Fluid Resistance (Shear strength values after 1,000 hours.)

| | Typical Values |
|-----------------------------------|-----------------------|
| Heat age @ 150°C | 100% |
| Engine oil @ 150°C | 85% |
| Brake fluid @ 150°C | 85% |
| ATF @ 150°C | 85% |
| 50/50 water/ethylene glycol @ 120 | °C 80% |
| Water @ 100°C | 80% |
| Gasoline @ 25°C | 95% |
| Diesel fuel @ 25°C | 100% |
| Ethyl Alcohol @25°C | 90% |

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.



Technical Data Sheet
Vibra-Tite® 111
Threadlocker

January 2018

General Information

Storage

Product should be stored in a cool and dry location at temperatures between 14°F (-10°C) to 86°F (30°C). Shelf life is 2 years from date of manufacture when stored at 72 ± 8 °F (22 ± 4 °C).

Note

Vibra-Tite 111 is suitable for most small diameter, fine threaded screws, nuts and bolts. Not recommended on certain plastics as stress cracking may occur. Vibra-Tite VC-3® Threadmate may be a possible alternative solution (compatibility must be tested). Some anti-corrosion chemicals inhibit the cure system in this type of anaerobic and use of primer may be required under these conditions. Product conforms to MIL-S-46163A, ASTM D-5363, NSF.

Health & Safety in use

See Safety Data Sheet for health and safety information.