VIBRA-TITE IS A REGISTERED TRADEMARK OF ND INDUSTRIES, INC.

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 ¼"), set screws, and screws that have long engagement length.

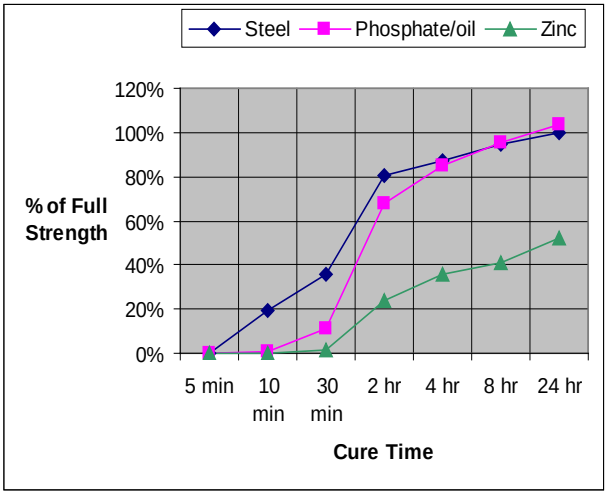
Properties of Uncured Material

Chemical Type: Anaerobic
Appearance: Purple
Toxicity: Low
Solids: 100%
Viscosity @ 25ºC, 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@ 72ºF
Full Cure Time: 24 hrs @ 72ºF
Temperature Range: -60ºF to 300ºF (-51ºC to 150ºC)

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 @ 150ºC	100%
Engine oil @ 150ºC	85%
Brake fluid @ 150ºC	85%
ATF @ 150ºC	85%
50/50 water/ethylene glycol @ 120ºC	80%
Water @ 100ºC	80%
Gasoline @ 25ºC	95%
Diesel fuel @ 25ºC	100%
Ethyl Alcohol @25ºC	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.

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.