

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 contained within this document is intended for reference only For assistance and recommendations on specifications for this product, contact ND Industries





Technical Data Sheet Vibra-Tite[®] 111 Threadlocker December 2016

General Information

Storage

Product should be stored in a cool and dry location at temperatures between $14^{\circ}F$ (- $10^{\circ}C$) to $86^{\circ}F$ ($30^{\circ}C$). Shelf life is 2 years from date of manufacture when stored at $72\pm8^{\circ}F$ ($22\pm4^{\circ}C$).

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

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.

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