

## Product Description

Vibra-Tite 133 is a high strength, thixotropic, heavy-duty, anaerobic locking material that maintains consistent performance through its recommended temperature range. Vibra-Tite 133 is designed for locking threaded fasteners that require disassembly with standard hand tools. The product performs on aluminum, steel, plated parts, stainless steel, and special alloy parts. Vibra-Tite 133 exhibits good temperature and solvent resistance.

## Typical Applications

Vibra-Tite 133 will lock and seal fasteners and set screws. Vibra-Tite 133 is used in applications where shock and vibration may cause the fastener to loosen.

## Properties of Uncured Material

<b>Chemical Type</b>	Methacrylic Ester
<b>Cure Type</b>	Anaerobic
<b>Secondary Cure</b>	Activator
<b>Percent Solids</b>	100
<b>Color</b>	Red
<b>UV Fluorescent</b>	Yes
<b>Viscosity @25°C<sup>1</sup></b>	1250 – 4250 cP
<b>Viscosity @25°C<sup>2</sup></b>	4000 – 8000 cP
<b>Specific Gravity</b>	1
<b>Application</b>	Threadlocking

1. Brookfield R Spindle 3, 20 rpm
2. Brookfield R Spindle 3, 2.5 rpm

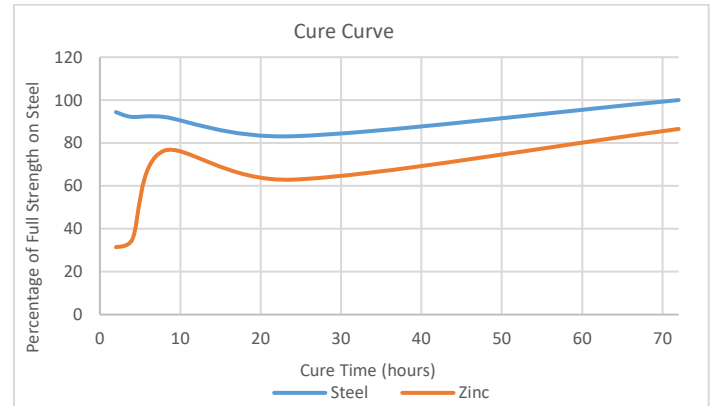
## Performance of Cured Material

### Typical Values (M10-1.5 Steel test bolt)

<b>Strength</b>	High
<b>Operating Range</b>	-51°C to 150°C (-60°F-300°F)
<b>Fixture Time</b>	15 minutes
<b>Breakaway Torque</b>	40 - 54 Nm (350 - 475 in*lbs)
<b>Prevailing Off Torque</b>	28 – 40 Nm (250 – 350 in*lbs)
<b>Breakloose Torque</b>	25 – 34 Nm (225 – 300 in*lbs)

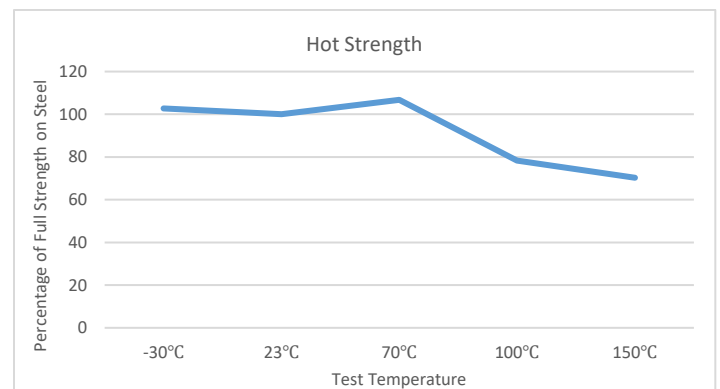
## Cure Speed

The cure speed is dependent on temperature and substrate. The graph below shows the Breakaway Strength on various common bolt and nut finishes. Testing was conducted on M10-1.5 bolts with Style 2 test nuts.



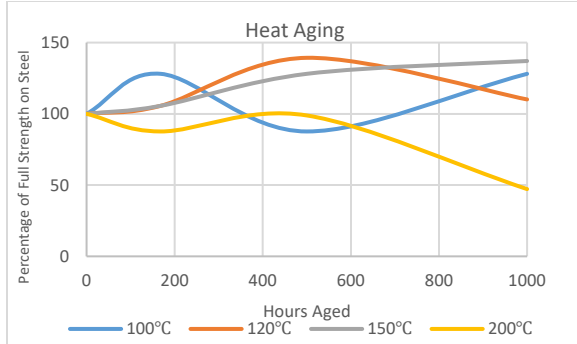
## Hot Strength

Parts were cured for 24 hours then held at temperature for two hours. Breakaway torque values were recorded for parts at temperature. Testing was conducted on M-10x1.5 bolts with a style 2 test nut



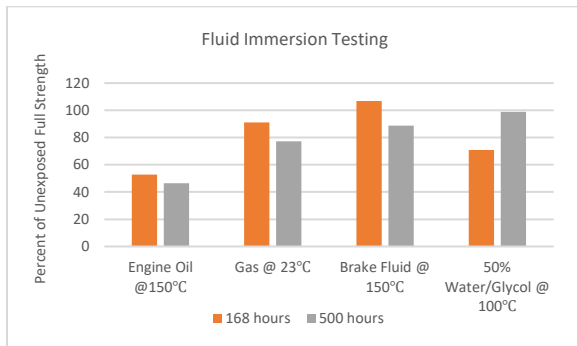
## Heat Aging

Parts were allowed to cure for 24 hours then were aged at the reported temperatures. Breakaway torque values were recorded at room temperature. Testing was performed on M10-1.5 plain steel nuts and style 2 bolts.



### Fluids Testing

Parts were allowed to cure for 24 hours then were submerged in the listed fluid(s) at the reported temperatures. Breakaway values for the M-10x1.5 plain test bolts were recorded at room temperature.



### 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 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). 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 133 is recommended for threaded components under 1" in diameter. Components can be disassembled using conventional hand tools. It is color coded blue and once cured, seals and vibration proofs the assembly giving controlled breakaway and prevailing torques.

### 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.