

ThreadPaste 441

Product Description

Hernon® Threadpaste 441 is a single component anaerobic thread-locking compound designed for applications subject to operating temperatures to 300°F.

The product delivers high strength locking and sealing on screws, nuts, bolts, studs and fittings. Excellent break-loose and prevailing torque values assure maximized resistance to transverse vibration loosening at elevated temperatures.

Typical Properties (Uncured)

| Property | Value | |
|-----------------------------|-----------------------|-------------------|
| Chemical Type | Dimethacrylate ester | |
| Appearance | Red fluorescent paste | |
| Viscosity @ 77°F (25°C), cP | spindle B, 0.5 rpm | 600,000-1,000,000 |
| | spindle B, 5 rpm | 50,000-100,000 |
| Specific gravity | 1.1 | |
| Flash point | See SDS | |

Typical Properties (Cured)

| Property | Value |
|--------------------------|------------|
| Temperature Range, °F | -65 to 300 |
| Set time, Steel, minutes | ≤20 min |

Typical Cured Performance

Torque Strength

Cured and tested at 22°C on 3/8 x 16 steel grade 5 bolts and type 2 nuts

| Cure | Torque | N•m (in-lb) |
|----------|------------|---------------------------|
| 24 Hours | Breakaway | 11.3 to 28.2 (100 to 250) |
| | Prevailing | 11.3 to 28.2 (100 to 250) |

Typical Environmental Resistance

Cured for 72 hours
3/8 x 16 Plated Steel Nuts and Bolts
Breakaway torque was measured.

Chemical/Solvent Resistance

Aged 1000 hours under conditions indicated and tested at 22°C.

| Chemical/Solvent | Temperature, °C | % of Initial Strength |
|-----------------------------|-----------------|-----------------------|
| Gasoline | 22 | 85 |
| Brake Fluid | 22 | 73 |
| Ethanol | 22 | 124 |
| Acetone | 22 | 58 |
| Ethanol Fuel | 22 | 101 |
| DEF | 22 | 135 |
| Motor Oil | 125 | 61 |
| Ethylene Glycol:Water 50:50 | 95 | 124 |

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some case, these aqueous washes can affect the cue and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). It is recommended to confirm compatibility of the product with such substrates.

Directions for Use

For best performance surfaces should be clean and free of grease. **Threadpaste 441** should be applied to the bolt in sufficient quantity to fill all engaged threads.

Disassembly and Cleanup

To aid in disassembly anaerobic compounds can be weakened by heating to temperatures above 500°F (260°C). Once disassembled, cured adhesive can be removed with **Hernon® Gasket Remover 30**.

Hernon® Technical Data Sheet

ThreadPaste 441

Storage

Threadpaste 441 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON MANUFACTURING, INC. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith. Hernon's Quality Management System for the design and manufacture of high-performance adhesives and sealants is registered to the ISO9001 Quality Standard.