

Technical Data Sheet Nuts N' Bolts[®] 418

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Product Description

Hernon[®] Nuts N' Bolts[®] 418 is a single component anaerobic adhesive/sealant that is formulated for applications where a low viscosity, medium strength thread locker is desired.

Performance Testing

Each batch of **Nuts N' Bolts[®] 418** is tested to the lot requirements of MIL-S-46163A (Type III Grade Q), and to the detail requirements of ASTM D5363 (AN0251).

Typical Properties

Property	Value
Chemical Type	Dimethacrylate ester
Appearance	Blue fluorescent liquid
Viscosity @ 77°F (25°C), cP	25
Specific gravity	1.10
Flash point	See MSDS
Temperature Range, °F	-65 to 300

Typical Curing Performance

Cure Speed vs. Temperature

The rate of cure will depend on the temperature. Full cure is attainable in 24 hours at room temperature, 22°C, or 1 hour at 93°C.

Typical Cured Performance

Torque Strength

Tested on 3/8 x 16 grade 2 nuts and grade 5 bolts according to ISO 10964.

Room Temp Cure	Breakaway	Prevail
	N•m (in-lb)	N•m (in-lb)
15 Minutes	1.1-17.0 (10-150)	1.1-28.2 (10-250)
24 Hours	2.3-17.0 (20-150)	10.1-28.2 (90-250)

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 Material Safety Data Sheet (MSDS).

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 cases these aqueous washes can affect the cure 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. **Nuts N' Bolts[®] 418** 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 at least 500°F (260°C). Once disassembled, cured adhesive can be removed with **Hernon[®] Gasket Remover 30**.

Storage

Nuts N' Bolts[®] 418 should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 82°F (8°C to 28°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.