

## Technical Data Sheet Nuts N' Bolts<sup>®</sup> 419

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### Product Description

**Hernon<sup>®</sup> Nuts N' Bolts<sup>®</sup> 419** is a one component, anaerobic material which has low strength for easy disassembly. Curing occurs only when the adhesive is confined between mating surfaces. **Nuts N' Bolts<sup>®</sup> 419** prevents loosening through vibration and leakage of threaded fasteners.

### Typical Applications

- Adjustment screws
- Machine screws
- Setscrews

### Product Benefits

- Single component
- Will not cure outside the joints
- Cures without cracking or shrinking
- No mixing
- Prevents rusting of threads
- Seals against leakage
- Prevents movement of screw threads and eliminates self-loosening

### Typical Properties (Uncured)

Property	Value
Chemical type	Dimethacrylate ester
Appearance	Purple fluorescent liquid
Viscosity @ 77°F (25°C), cP	110-175
Specific gravity	1.06
Flash point	See SDS

### Typical Properties (Cured)

Property	Value
Temperature Range, °C (°F)	-55 to 150 (-65 to 300)
Set Time, Steel, minutes	<20
Gap Filling	0.005 in.

### Typical Cured Performance

Cured and tested at 22°C on 3/8 x 16 grade 5 bolts and type 2 nuts according to ASTM D5363.

Cure	Substrate	Torque	N•m (in-lb)
24 Hours	Steel	Breakaway	5.6 to 11.3 (50 to 100)
		Prevailing	2.3 to 22.6 (20 to 50)
	Plated	Breakaway	1.1 to 11.3 (10 to 100)
		Prevailing	1.1 to 4.6 (10 to 40)

### 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 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<sup>®</sup> 419** 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<sup>®</sup> Gasket Remover 30**.

### Storage

**Nuts N' Bolts<sup>®</sup> 419** 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<sup>®</sup>** offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon<sup>®</sup> Sales** for additional information.

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