

EST. 1978 TECHNICAL DATA SHEET ISO-9001

Nuts N' Bolts® 428

Product Description

Hernon® **Nuts N' Bolts**® **428** is a single component anaerobic threadlocking compound designed for heavy duty applications subject to operating temperatures to 450°F (232°C).

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

Meets requirements of CID A-A-59720 Grade HT

Typical Applications

- Heat treat furnace equipment.
- · Annealing equipment.
- Rolling mill components, conveyances.
- Hot forge, induction heating equipment.

Typical Properties (Uncured)

Property	Value
Chemical Type	Dimethacrylate ester
Appearance	Red fluorescent liquid
Viscosity @ 77°F (25°C), cP	4000 to 8000
Specific gravity	1.13
Flash point	See SDS

Typical Properties (Cured)

Property	Value
Temperature Range, °F	-65 to 450
Set Time, Steel, minutes	45-60
Gap Filling	0.007 in.

Typical Cured Performance

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

Cure	Substrate	Torque	N∙m (in-lb)
24 Hours	Steel	Breakaway	16.9-39.5 (150-350)
		Prevailing	16.9-56.5 (150-500)
	Plated	Breakaway	16.9-22.6 (150-200)
		Prevailing	16.9-28.2 (150-250)

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 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. **Nuts N' Bolts**[®] **428** 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® 428 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.

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