

# Nuts N' Bolts™ for threadlocking

## Main Benefits

- Increases operational reliability by preventing loosening of threaded assemblies
- Lowers your inventories and costs by using one bottle for all thread sizes



## Features

- Fills the gaps between the threaded metallic surfaces by undergoing anaerobic (absence of oxygen) cure, tightening bolts against vibrations, impact and thermal expansion.
- Replaces mechanical fasteners like spring washers, lockwashers and nylon inserts, tab washers or split pins.

## Other Benefits

- Less expensive compared to mechanical fasteners
- Does not damage the surfaces or deform the threads
- Allows reuse of bolts and nuts
- Seals threads against leakage
- Prevents internal corrosion for easy disassembly
- Allows fastening of dissimilar metals
- Lubricates for controlled torquing and clamp load
- High chemical and temperature resistance
- Easy to apply and clean, no mixing required
- Tamperproof™ reduces warranty claims caused by meddling and tampering to your fasteners



## Typical Applications

- Adjustment and calibration screws
- Bolts on fange plate, housing and transmission drives
- Wheel mounting and heavy equipment studs
- Vibrating machinery fasteners
- Control mechanisms
- Valve seats

## Application Notes

- Herson Nuts N' Bolts™ are effective on "as received" parts for normal applications
- For critical applications, degrease all nuts and bolts with EP™ Cleaner 62.
- For easier dispensing, shake the bottle well before use.
- For installing on blind holes, apply a few drops into the bottom of the hole.
- For bolts with an engagement length over diameter ratio of more than one, use Nuts N' Bolts™ 420 and apply on both threads.
- For disassembly of high strength Nuts N' Bolts™, apply high torque or localized heating of up to 250°C.
- For thread sizes larger than M12 (1/2"), use Nuts N' Bolts™ 42B which has high viscosity to fill larger gaps.
- For over-hanging fasteners, use Nuts N' Bolts™ 431 with wicking capillary action.
- For plastic fasteners or plastic housings, use Nuts N' Bolts™ 128.

## Usage Information

Bolt Size Metric (NPT)	No. of applications with manual dispensing of a 50 ml volume
M6 (1/4")	1851
M8 (5/16")	1111
M10 (3/8")	666
M12 (1/2")	370
M14 (9/16")	277
M16 (5/8")	222
M18 (3/4")	147

	Unassembled parts					Preassembled parts	
	Low strength	Moderate strength	High strength			Moderate / high strength	Tapering induction
	Nub N'Bole™ 420	Nub N'Bole™ 421	Nub N'Bole™ 425	Nub N'Bole™ 427	Nub N'Bole™ 428	Nub N'Bole™ 431	Tempcoat™ 610
<b>Key Performance</b>	For sizes smaller than M8 (1/4")	For all sizes	Fast curing	High chemical resistance	High service temperature	Penetrating action, Porosity sealing	Water based, For oily surfaces
<b>Color</b>	Purple	Blue	Red	Red	Red	Green	Dark Blue
<b>Viscosity, cP</b>	1000 to 5000	1000 to 5000	1800 to 5000	450 to 550	7000	15	Rheotropic gel
<b>Cap Fill, mm</b>	0.127	0.127	0.127	0.178	0.178	0.108	-
<b>Breakaway/ Prevaling Torque, Nm</b>	5/4	12/6	22/32	26/36	22/30	10/25	-
<b>Cure Speeds @ 24°C /Jcture /Full cure</b>	90 min/ 24 hrs	25 min/ 24 hrs	5 min/ 24 hrs	20 min/ 24 hrs	30 min/ 24 hrs	3 min/ 12 hrs	5 min/45 min (Tack free/ Full cure)
<b>Recommended EP™ Primer</b>	49 or 50	49 or 50	49 or 50	49 or 50	49 or 50	49 or 50	-
<b>Temperature Range, °C</b>	-25 to 150	-25 to 150	-25 to 150	-25 to 150	-25 to 232	-25 to 204	-
<b>Specification</b>	MLS- 401034 Grade M, ASTM D 5863 AN 0211	MLS- 401034 Grade R, ASTM D 5863 AN 0321	MLS- 401034 Grade D, ASTM D 5863 AN 0331	MLS- 401034 Grade L, ASTM D 5863 AN 0391, II	-	MLS- 401034 Grade R, ASTM D 5863 AN 0361	-