

Technical Data Sheet ND Patch<sup>®</sup> Hi-Temp July 2019

# **Product Description**

ND Patch<sup>®</sup> Hi-Temp is the highest temperature nylon threadlocking patch available in the market. It can be used in applications that see temperatures up to 260°C (500°F). The ND Patch Hi-Temp is preapplied at ND Industries' Processing Centers producing a dry to the touch, ready-to-use inert selflocking fastener. Application of ND Patch Hi-Temp is a highly engineered process creating precise placement of the polyamide based threadlocking compound. Generally, the placement of the material is two to three threads from the end of the fastener to allow for trouble-free starting of the assembly.

ND Patch Hi-Temp is completely adjustable, repositionable, and reusable up to 5 times.

ND Patch Hi-Temp can be applied to internally and externally threaded fasteners of all configurations.

Fused onto fasteners, ND Patch Hi-Temp is highly resistant to most commercially available solvents, alcohol, gasoline, oil caustic soda, jet fuel, diesel fuel, etc.

### **Applications:**

ND Patch Hi-Temp is used in a wide range of industries. Examples include (but not limited to):

- Seat Belts
- Seat Track to Floor
- Steering Columns
- Seat Assemblies
- Door Assemblies
- Military and Defense
- Set Screws
- Large Appliances
- Off Road Equipment
- Farm Equipment
- Construction Equipment
- Electronics
- Aerospace
- Agricultural Equipment
- Many more

### How ND Patch Hi-Temp Works:

ND Patch Hi-Temp is formulated to have better heat resistance than competing materials. When assembled with a mating part, ND Patch Hi-Temp is compressed. The compressed material provides locking in the thread due to the wedge that is formed. This wedge creates a strong but fully adjustable lock within the bolted joint.

#### **Typical Properties**

Primary Usage	Lock and Seal
Reusability	Up to 5 on-off cycles
Color	Terra Cotta
Hardness	Shore D (ASTM D2240) 70-80 Durometer
Salt Spray	(ASTM B117) 1000+ Hours Resistant
Taber Abrasion	(ASTM D4060) 10-18 mg loss CS-10
	wheel, 1000g load, 1000 cycles
Temperature Range	(MIL-DTL-18240F) -57°C to +260°C
Shelf-Life	Minimum 4 years under ideal storage
	conditions (4°C to 30°C and <50% relative
	humidity)

## **Specifications:**

ND Patch Hi-Temp is meets or exceeds the following specifications or industry standards:

- GM 6189P
- FCA PF-5144, PF-5461, PF6157, PF-6158
- Ford ES-382101-S100, ES378813-S100, ESN800688, WA970, ES-21002-S100
- NASA SP-R-0022A (ASTM E595)

### Note:

The data are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.

Technical data contained within this document is intended for reference only

For assistance and recommendations on specifications for this product, contact ND Industries