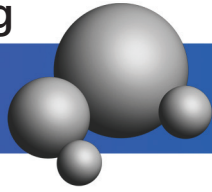


ND Patch®

Locking & Sealing



ND Industries® is ISO9001:2000 / AS9001B / QPL-18240F Listed / QSLM Registered



QPL-Listed
Automotive Approved



DESCRIPTION:

- The ND Patch coating process produces a completely dry product that is fused to the fastener and is ready to use right out of the box. ND Patch performs immediately upon assembly with no curing time required.
- How ND Patch Works: When assembled with a mating part the resilient ND Patch is compressed. The compressed engineered plastic (normally Nylon) Patch provides locking action in the thread instead of at the bearing surface due to its vibration dampening characteristics. In general, the resilience of ND Patch holds the fastener in place without adhesives or thread distortion. Due to its resilience, Patch can be repeatedly adjusted and reused.
- ND Patch and ND 360° Ring Patch is normally positioned one to three threads back from the end of the fastener to assure ease of starting. The normal coating length of the Patch is four to six threads. Special Patch location and coating length can be specified for specific applications.
- As with all of our **PreApplied** products, ND Industries can apply Patch to your fasteners at any one of our regional service centers, or we can supply you with fasteners already coated with ND Patch.

FEATURES:

- Improved Sealing:** ND 360° Ring Patch provides excellent locking performance as well as increased sealing ability by completely filling the thread helix with an elastic 360° nylon dam.
- Retains Full Strength:** ND Patch process involves no drilling or milling, so there is no loss of the fastener's strength or hardness and no troublesome burrs or chips.
- Saves Money:** Use of ND Patch eliminates the need for costly lock washers, cotter pins, or castellated nuts. You get a close fit without the costs involved in obtaining close tolerances. Moreover, ND Patch is less expensive than applying bottled thread locking compounds at the point of assembly.



FEATURES CONTINUED:

- Saves Time:** Fasteners coated with ND Patch can be automatically fed through standard feeding devices.

ND Patch meets or exceeds the performance requirements of the following specifications and/or standards:

MILITARY

- MIL-DTL-18240F**, MIL-N-25027

AUTOMOTIVE

- DaimlerChrysler PF-5144, PF-5461, PF-6157, PF-6158
- Ford ES-382101-S100, ES-378813-S100, ES-N800688-S100, WA970, ES-21002-S100
- General Motors GM 6189P

INDUSTRIAL FASTENER INSTITUTE

- IFI 124
- IFI 524
- DIN 267 Part 28

OEM

- John Deere JDT905
- Mack Trucks 3/6 AXS5, 10 AMS1
- FMC 126052
- Cummins Engine 16,512-05
- Meritor (Rockwell) Q-70

For a complete list, contact ND INDUSTRIES.

FEATURES CONTINUED:

- Resists Heat & Cold:** ND Patch meets and exceeds IFI Specifications 124 & 524 as well as Military specification MIL-DTL-18240F, Type P, for temperatures up to +250°F (up to +121°C).
- Chemical Resistant:** ND Patch will not dry, shrink, or lose resiliency when exposed to commercial solvents, alcohol, gasoline, oil, caustic soda, jet fuel, etc.
- Reusable:** Fasteners coated with ND Patch can be reused repeatedly without damage to threads. ND Patch is particularly resistant to deformation, which makes it ideal for repeated use.
- Saves Effort:** ND Patch greatly reduces the need for retightening.

SPECIFICATIONS:

- Primary usage Lock and Seal
- Reusability Up to 15 on-off cycles
- Material Nylon 11
- Color Yellow (other colors available upon request**)
- Hardness Shore D (ASTM D2240) 70-80 Durometer
- Salt Spray Resistance (ASTM B117) 1000+ hours (X scribe)
- Taber Abrasion (ASTM D4060) 10-18 mg loss CS-10 wheel, 1000 g load, 1000 cycles. (varies with color)
- Dielectric Strength (ASTM D149 short time) 800-1200 volts/mil @ 10.0 mils (varies with color)
- Direct Impact Resistance . . (MPTM 0002) 160 in. lbs. (@10.0 mils)

® ND, ND Patch and ND Industries are registered trademarks of ND Industries, Inc.

** QPL-18240 & MIL-DTL-18240F requires yellow nylon

Shelf Life: The on part shelf life is at least one year under ideal storage conditions (+4°C to +32°C, or +40°F to +90°F).

For more information on ND Patch, or any of ND Industries' other quality fastening products, contact your nearest ND Service Center:

ND Western Fastener Processing Division
13929 Dinard Avenue
Santa Fe Springs, California 90670
Phone: 562-926-3321
FAX: 562-926-4266

ND Midwestern Fastener Processing Division/Detroit
1000 North Crooks Road
Clawson, Michigan 48017
Phone: 248-655-2529
FAX: 248-655-2562

ND Industries Asia, Inc./Taiwan
4-5 Lane 832 An-Jau Road
Yen-Chou
Kaoshiung, Taiwan R.O.C.
Phone: 886-7616-7733
Fax: 886-7616-6611

ND Southwestern Fastener Processing Division
3611 Dalworth Street
Arlington, Texas 76011
Phone: 817-633-2788
FAX: 817-649-7730

ND Midwestern Fastener Processing Division/Cleveland
9051 Dutton Drive
Twinsburg, Ohio 44087
Phone: 330-425-3167
FAX: 330-425-3065

ND Electronics (Kunshan) Co., Ltd.
395 Ye Cheng Zhong Road
Kunshan City, China 215300
Phone: 86-512-57765335
Fax: 86-512-57755353

ND Midwestern Fastener Processing Division/Chicago
1840 Raymond Drive
Northbrook, Illinois 60062
Phone: 847-498-3600
FAX: 847-498-1582

ND Southeastern Fastener Processing Division
2220-C Center Park Drive
Charlotte, North Carolina 28217
Phone: 704-329-0033
FAX: 704-329-0975

ND Midwestern Fastener Processing Division/Rockford
3954 South Central Avenue
Rockford, Illinois 61102
Phone: 815-963-3600
FAX: 815-963-4195

ND Eastern Fastener Processing Division
128-2 Bauer Drive
Oakland, New Jersey 07436
Phone: 201-651-1500
FAX: 201-651-1400

Proudly Represented by:



Specialty Sales

**Manufacturer's Representative Agency
Fasteners and Electronic Components**

Ira Shushan PH 805.491.5161 Fax 805.491.5162 Email: IShushan@aol.com

Robert Lopez PH 562.833.6234 Fax 562.262.2714 Email: RLopez@SpecialtySalesReps.com

Corporate Offices

1000 North Crooks Road · Clawson, Michigan 48017 USA · Phone: 248-288-0000 · Fax: 248-288-0022
Visit our web site at www.ndindustries.com · e-mail: ndinfo@ndindustries.com



Los Angeles · Dallas · Chicago · Rockford · Detroit · Cleveland · Charlotte · New York · Orlando
Kaoshiung, Taiwan · Kunshan City, China