

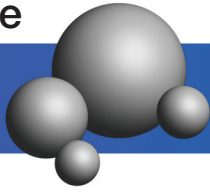
# ND MICROSPHERES®

## Fastener Adhesive

PreApplied

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

TA Series



ND  
INDUSTRIES

### DESCRIPTION:

- ❑ ND Microspheres TA Series are microencapsulated, room temperature curing threadlocking products that can be applied to male or female threaded fasteners of most sizes and finishes.
- ❑ ND Microspheres TA Series remain inert until the coated fastener is assembled to its mating part. The forces of engagement crush the microscopic capsules and release the activator that creates a strong chemical bond between the parts.
- ❑ Within minutes of assembly, ND Microspheres TA Series forms a substantial bond between the mating surfaces. Curing continues normally for up to 24 hours.

COMPARE TO PRECOTE\*\*

### FEATURES:

- ❑ **Low Prevailing On Torque:** Assembles easily with common hand tools.
- ❑ **Fast Fixture Time:** Under typical conditions, fixture is achieved within 5 minutes.
- ❑ **Versatile:** ND Microspheres TA Series are compatible with most sizes, configurations, materials and finishes.
- ❑ **Long Shelf Life:** Once applied and stored in a cool, dry environment, ND Microspheres TA Series remains inert until a cure is activated by engagement with a mating part.
- ❑ **Unaffected By Foreign Substances:** Oil, gasoline, salt spray, acids, solvents, and water have virtually no effect on ND Microspheres TA Series after a final cure is achieved.
- ❑ **Saves Money:** ND Microspheres TA Series brand pre-applied threadlocker is less expensive than applying bottled threadlocking compounds at the point of assembly.



### FEATURES CONTINUED:

- ❑ **Three Specifically Designed Formulas:**  
ND Microspheres TA Series offers three formulas that address differing needs.  
**TA300** is a low strength material.  
**TA800** is a high strength/high temperature material.  
**TA850** is a high strength, high temperature material with minimal torque tension deviation.

ND Microspheres TA Series meets or exceeds the performance requirements of the following specifications and/or standards:

#### AUTOMOTIVE

- ❑ DaimlerChrysler PF-6616 & MC-CD76
- ❑ Ford ESS-M11P24-A1 & ESS-M11P24-A2, WX-200
- ❑ General Motors GM6175M, GM6194M, GM6124M

#### INDUSTRIAL FASTENER INSTITUTE

- ❑ IFI-125
- ❑ IFI-525

#### OEM

- ❑ Detroit Diesel 80K15
- ❑ Rockwell International Q-29
- ❑ Caterpillar 1E2486

#### MISC

- ❑ DIN 267

For a complete list, contact ND INDUSTRIES.

**PROPERTIES SUMMARY:  
As Applied to Fasteners**

Product Formula	TA300	TA800	TA850
Color (See Note 1)	Yellow	Red	Turquoise
Primary Usage	Low Strength	High Strength	High Strength Torque Tension Control
Average On Torque* (in lbs.)	<10	<10	<10
Breakaway Torque* After 24 hour cure @ R.T. Dry Zinc Phosphate (inch lbs.)	130	200	175
Plain Steel (inch lbs.)	130	210	195
Typical Lead Threads (See Note 2)	1 to 3	1 to 3	1 to 3
Typical Coating Length (See Note 2)	1.5 x Diameter	1.5 x Diameter	1.5 x Diameter
Temperature Range °F °C	-58/300 -50/150	-58/392 -50/200	-58/392 -50/200
Average Thread Friction K-Value	0.14	0.26	0.18
Fixture Time	5 min.	5 min.	5 min.
On Part Life***	4 years	4 years	4 years
Compare to	PRECOTE 30	PRECOTE 80	PRECOTE 85
Full Cure Time @ Room Temperature	24 hrs.	24 hrs.	24 hrs.

**Liquid State (before application)**

Product Formula	TA300	TA800	TA850
Base Resin	acrylate	acrylate	acrylate
Base Solvent	Toluene	Toluene	Toluene
Brookfield Viscosity (cPs)			
Spindle 6 @ 20 RPM	approx. 1,000	approx. 1,000	approx. 1,000
Flashpoint TCC	40.0°F	40.0°F	40.0°F
Shelf Life***	3 months min.	3 months min.	3 months min.

Note: See MSDS for Safety & Material Handling Instructions.

Note1: Other colors available upon request.

Note 2: Customer may specify location & coating length.

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\* Based on 3/8 - 16 bolts using plain steel nuts.

\*\* PRECOTE, PRECOTE 30 and PRECOTE 80 are registered trademarks of PRECOTE USA.

\*\*\* Stored in a cool, dry environment.

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

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