

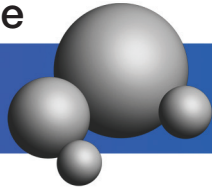
ND MICROSPHERES®

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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