

## **Product Description**

ND Microspheres® TA 300 is a medium strength, high temperature, controlled tension pre-applied adhesive for locking and sealing fastener assemblies. TA 300 is formulated to provide a dry film of adhesive that is non-reactive until engagement with the mating fastener. Upon engagement, the reactive microspheres rupture and react to form a robust chemical bond.

## **Typical Applications**

ND Microspheres® TA 300 prevents loosening due to vibration, shock, and thermal effects. TA 300 has a predictable coefficient of thread friction providing a benefit to the user of highly predictable tightening strategies. It is used in a wide range of industries. Examples are included (but not limited) in the list below:

- Ring gear bolts
- Head Bolts
- Chassis Hardware
- Intake Manifold Bolts
- Military and Defense
- Large Appliances
- Off Road Equipment
- Farm Equipment
- Construction Fasteners
- Aerospace
- Agricultural Equipment
- Many more

## **Advantages**

- Ready for install without the mess and waste of bottled thread adhesives
- Precise application to only the specified region of threaded fastener
- Controlled coefficient of friction resulting in highly repeatable/predictable joint tension

- Bonds to all commonly used fastener finishes
- Long shelf-life when properly stored
- Seals against high pressures
- Can be applied to internal and external threaded fasteners
- Chemically resistant to most commonly used solvents and fluids

## **Performance of Cured Material**

	<b>Typical Values</b>
Appearance	Yellow
Prevailing On Torque	< 1.0 N·m
Breakaway Torque	> 12 N·m
Prevailing Off Torque	> 3 N·m
Temperature Range	-58°F to +300°F (-50°C to +150°C)
Fixture Time	< 30 minutes
Cure Time	24 hours
Thread Coefficient	0.11
K-factor	0.18

## **Storage**

Fasteners coated with TA 300 are to be stored in a cool and dry location with temperatures between -10°C to +35°C and a maximum relative humidity of 65%.

## **Note**

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.