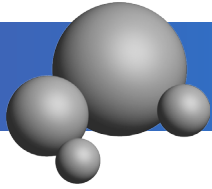


ND MICROSPHERES® ACRYLIC

Locking & Sealing



DESCRIPTION:

ND Microspheres Acrylic Series of threadlocking products are microencapsulated, room temperature curing adhesives that can be applied to male or female threaded fasteners of virtually all sizes, configurations, materials and finishes.

ND Microspheres Acrylic Series contains a microencapsulated activator that is suspended in a quick curing waterborne resin. The shearing forces caused by engagement with a mating part releases the activator and allow it to mix with the resin. The resulting chemical reaction rapidly bonds the surfaces, locking the parts together and sealing leak paths. ND Microspheres Acrylic Series offers consistent and predictable torque values and requires no heat or primers for curing.

FEATURES:

Unaffected By Automotive Fluids: ND Microspheres Acrylic Series resists and seals against most automotive fluids. Oil, water, antifreeze, and gasoline have virtually no effect on ND Microspheres Acrylic Series once the final cure has been achieved.

Variety of Strengths, Colors, & Viscosities: ND Microspheres Acrylic Series is available in a variety of colors for easy part inspection and in different strengths to fit the desired application.

Fast Fixture Times: Under typical conditions fixture is achieved within 5 minutes.

High Temperature & Torque Sensitive Formulas: ND also manufactures formulations of ND Microspheres Acrylic Series that are specifically intended for use in high temperature or torque/tension sensitive applications.

Saves Money: ND Microspheres Acrylic Series thread adhesives are less expensive than applying bottled threadlocking compounds at the point of assembly.

Competes with Loctite® Dri-Loc®



Attention Production Fastener Coaters:

ND Microspheres Acrylic formulations are available in liquid form for application by fastener coating companies.

FEATURES CONTINUED:

Suitable for Production Coating: Each formula of the ND Microspheres Acrylic Series family is available in viscosities suitable for use on a broad range of production coating equipment.

Minimal Clean-up Requirements: Clean-up is a simple process that requires only soap and water.

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

AUTOMOTIVE:

- Chrysler: MS-CC76 Type A&C, PF-6616
- Ford: ES-20007-S100, ES-20010-S100, ES-377734-S100, WX-200, ESS-M11P24-A1&A2, WSS-M11P45-A1, WSK-M2G354-A2
- General Motors: GM6124M, GM6194M, GM6175M, GMW 14657A&C

INDUSTRIAL FASTENER INSTITUTE:

- IFI: IFI 125, IFI 525
- DIN: DIN 267

OEM:

- American Axle: MS-2409
- British Standard: BS EN 26977
- Delphi: DX520402
- Eaton: PS-005

For a complete list contact ND Industries.

SPECIFICATIONS:

As Applied to Fastener																
Formula	AA0695	AA0696	AA0795	AA0796	AA0895	AA0896	AA0995	AA0996	AA1095	AA1096	AA1195	AA1196	AA1295	AA1296	AA1395	AA1396
Color*	Yellow	Yellow	Yellow	Yellow	Green	Green	Silver	Silver	Pink	Pink	Blue	Blue	Pink	Pink	Green	Green
Primary Usage	General Purpose	General Purpose	High Temp.	High Temp.	Medium Strength	Medium Strength	Low Strength	Low Strength	Plated Surfaces	Plated Surfaces	High Strength High Lubricity	High Strength High Lubricity	Plated Surfaces	Plated Surfaces	Medium Strength	Medium Strength
Typical Lead Threads**	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3
Typical Coating Length**	1.5x Dia.	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia	1.5x Dia
Average On Torque *** (in lbs.) (Nm)	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13	<10 <1.13
Break/Prevail Torque After Full Cure*** (in lbs.) (Nm)	210/250 24/28	210/250 24/28	225/250 25/28	225/250 25/28	200/185 23/21	200/185 23/21	175/100 20/12	175/100 20/12	270/260 30/30	270/260 30/30	210/95 24/11	210/95 24/11	300/240 34/27	300/240 34/27	245/150 28/17	245/150 28/17
Temperature Range °F °C	-65/300 -54/150	-65/300 -54/150	-65/400 -54/200	-65/400 -54/200	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150	-65/300 -54/150
Lubricity	Medium	Medium	Low	Low	Medium	Medium	Medium	Medium	Low	Low	High	High	Medium	Medium	Medium	Medium
Fixture Time	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.	5 Min.
On-Part Life****	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years	4 Years
Competes With	Loctite® Dri-Loc ®200	Loctite® Dri-Loc ®200	Loctite® Dri-Loc ®201	Loctite® Dri-Loc ®201	Loctite® Dri-Loc ®202	Loctite® Dri-Loc ®202	Loctite® Dri-Loc ®203	Loctite® Dri-Loc ®203	Loctite® Dri-Loc ®204	Loctite® Dri-Loc ®204	Loctite® Dri-Loc ®STS	Loctite® Dri-Loc ®STS	Loctite® Dri-Loc ®211	Loctite® Dri-Loc ®211	Loctite® Dri-Loc ®218	Loctite® Dri-Loc ®218
Full Cure Time @ Room Temp.	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours	72 Hours
Brookfield Viscosity (cPs) Spindle @ 20 RPM	12,000	800	12,000	800	12,000	800	12,000	800	12,000	800	12,000	800	12,000	800	12,000	800
Resin (Anaerobic)	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate	Meth- acrylate
Specific Gravity	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15	1.05 to 1.15
Fixture Time Cleveland Open Cup	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C	Above 200°F / 93°C

* Other colors available upon request
 ** Customer may specify location and coating length
 *** Based on 3/8 - 16 dry phosphated bolts and nuts
 **** Varies due to storage conditions
 ®Loctite and Dri-loc are registered trademarks of Henkel Corp, USA.

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