

# ND MICROSPHERES® ACRYLIC

ND Microspheres Acrylic is a process in which microencapsulated, room temperature curing acrylic threadlocking adhesives are applied to male or female threaded fasteners of virtually all sizes, materials and finishes. Acrylic threadlockers offer consistent and predictable torque values and require no heat or primers for curing.



# PRE-APPLIED PROCESS INFORMATION

#### How It Works

After choosing ND Microspheres Acrylic processing, have your parts sent to one of ND's service centers.

ND will then apply a microencapsulated activator suspended in a quick curing waterborne resin. This material dries on the part and is then shipped back to the customer for use.

When installed, the shearing forces caused by engagement with a mating part release 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.



Processed parts resist and seal against most automotive fluids. Oil, water, antifreeze, and gasoline have virtually no effect on performance once the final cure has been achieved.



After installation parts typically fixture in under 5 minutes. However to reach full strength it is recommended to allow a full cure of 72 hours.



ND Microspheres Acrylic processing can be specified in a variety of colors for easy part inspection and in different strengths to fit the desired application.



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ND applies material formulations which are specifically intended for use in high temperature or torque/tension sensitive applications.



ND Microspheres Acrylic procesed parts meet or exceed all torque requirements of IFI 125, IFI 525, as well as automotive adhesive coated fastener performance specifications.

# CONTACT US

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# PRE-APPLIED ND MICROSPHERES® ACRYLIC



#### **PROCESS BENEFITS**

**Saves Time:** Processed fasteners can be automatically fed through standard feeding devices – speeding up your workflow and improving productivity.

**Saves Money:** ND Microspheres Acrylic processing is less expensive than hand applying bottled thread locking compounds at the point of assembly. It also eliminates the need for costly lock washers, cotter pins or castellated nuts.

**Quality Control:** Pre-Applied ND Microspheres fasteners are coated to specification, ensuring consistent performance, unlike the variation from hand applying bottled products.

**Reliability:** Under most operating conditions, processed parts are unaffected by vibration or reversal of stress and greatly reduces the need to re-tighten fasteners.

# ND MICROSPHERES ACRYLIC APPLICATIONS

Engine Applications, Automotive Locking Applications, Automotive Body/Frame Bolts, Suspension Areas, Brakes, Rear-End, Transmissions.

# **APPROVED SPECIFICATIONS**

Meets or exceeds the performance requirements of the following specifications and/or standards:

- Chrysler: PF-6616, MC-CC-76 A & C
- Ford: ES-377734-S100, ESE-M2G260-A1, ESE-M2G260-A2, ESE-M2G260-A3, ESE-M2G260-A4, ESS-M11P24-A1, ESS-M11P24-A2, WSK-M2G354-A1, WSK-M2G354-A2, WSK-M2G354-A3, WSK-M2G354-A4, WSK-M2G354-A5, WSS-M11P45-A1, WX-200
- General Motors: GM6124M, GM6175M, GM6194M, GMW14657A, GMW14657C

#### **PROCESSING NOTES**

- Materials used with ND Microspheres Acrylic processing have an on part life of 4 years. (When stored in a dry, cool environment.)
- Typically the first one to three threads from the end of the fasteners are left free of material to assure ease of starting.
- It is recommended that ND Microspheres Acrylic processed parts are not reused.
- Water based acrylic materials should be tested for compatibility on application specific organic zinc fasteners with lubricated top coatings. ND Microspheres Epoxy processing could be used as an alternative for any incompatibility.

# PRE-APPLIED SERVICE

**Step 1 - Process Selection:** Our sales and R&D staff will help you find the right process to meet your performance specifications.

**Step 2 - Shipping:** Once a selection has been made, have your fasteners shipped to one of our worldwide processing centers.

**Step 3 - Processing:** Utilizing custom, high-speed equipment, we apply the necessary materials to your exact specification.

**Step 4 - Delivery:** Once processing is complete, parts are shipped back ready for distribution or assembly.