#### GENERAL PURPOSE THREAD SEALANT

- For use to seal threaded metal fasteners
- Locks fastener threads to prevent loosening from vibration
- Ideal for metal pipe thread, flare, and compression fittings
- Ideal for thread locking bolt/nut applications, screws and studs
- Fast curing blue colored anaerobic formulation
- Quick and easy to apply
- Protects threads from rusting
- Excellent chemical resistance
- Medium strength fitting can be removed with hand tools

### **Description**

NuLock (p/n: 4289-01) is a general purpose, fast curing, medium strength anaerobic thread locking formulation for bonding and sealing threads, and retaining of cylindrical parts. An anaerobic based product remains liquid until isolated from oxygen with metal contact in fitting threads. To cure, the product requires lack of oxygen in close contact with metal surfaces – its timing depends on the metal alloy. The process results in a chemical resistive cross-link polymer with great adhesion to metals that provides both a thread sealant and locking – depending on application. NuLock is highly resistant to heat, vibrations with excellent chemical resistance.

## **Application**

NuLock formulation 4289-01 is a general-purpose thread sealant and locking formulation for metal fasteners in a variety of applications. Ideal for sealing and locking metal pipe thread fittings, flare fittings, compression fittings. Other applications of NuLock include general purpose locking of threads of metal fasteners such as bolt/nut assemblies, screws and threaded metal studs. For metal fasteners up to ¾ inch in diameter. Product prevents rusting of threads. Use simple hand tools for fastener removal after product cure. NuLock is NOT for use on plastic parts or for oxygen-rich systems or as a sealant for strong oxidizing materials.

NuLock formulation 4289-01 could be used for thread sealing/locking of threaded metal fasteners for refrigerant systems. However, NuLock formulation 4289-02/05 is preferred due to its maximum chemical resistance and higher strength properties for threaded assemblies in refrigerant systems.

### **Specialty Products**

# NuLock™



# **Packaging**

50ml bottle 4289-01

### **Properties**

Composition: Methacrylate ester

Appearance: Blue liquid

Viscosity: 1,200 cps at 77°F (25°C)

Flash Point: > 212°F (100°C) Shelf Life: Two years

Application Temperature: Apply above 50°F (10°C)

Temperature Range: -65°F to 300°F

Odor: Minimal

Handling Cure Time: 10 minutes Functional Cure Time: 1-3 hours

Full Cure: 24 hours

Breakaway Torque, ISO 10964:

• 3/8 x 16 steel bolt/nut: 70 to 150 in-lb.

• 3/8 x 16 zinc plated bolt/nut: 20 to 60 in-lb.

#### **Directions**

For professional use only, use personal protection equipment as required. Surfaces should be dry, clean, and free of contamination. Never use NuLock on plastic fittings – only metal mechanical connections. Apply a generous 360-degree bead of NuLock in the leading threads of the metal male fitting, less the leading thread. Apply NuLock in sufficient quantity to fill threads to prevent a product void when connecting mating fasteners. For bigger connections, adjust the amount product use to fill thread volume accordingly, including applying a bead of NuLock on the female threads as well for best sealing/locking results.



For flare fittings, apply a small amount of NuLock on the machined flared surface for seal durability. This is especially advantageous when there are imperfections on the machined face surface. This is addition to applying NuLock to the male threads to lock the connector in place so it does not loosen over time due to vibration.

For compression fittings, a small amount of NuLock can be utilized on the brass compression sleeve and tube to improve the seal area if this a problem in the field. Use NuLock on the male threads of the compression fitting to lock the fastener in position so it does not loosen over time due to vibration. For all threaded metal connectors, assemble parts and tighten as required. The handling cure time for NuLock is 10+ minutes. The product functionally cures in 1-3 hours and fully cures in 24 hours. Recap the NuLock cap tightly to the bottle for future use. Never return any dispensed NuLock sealant back to its original bottle.

Storage: Optimum storage for NuLock is in its original unopened bottle in a conditioned environment ranging 46°F to 82°F.

For additional safety information, see the product safety data sheet (SDS).

