### REFRIGERANT 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 red colored anaerobic formulation
- Quick and easy to apply
- Protects threads from rusting
- Excellent chemical resistance
- Superb strength can be removed with hand tools

### **Description**

NuLock (p/n: 4289-02 & 4289-05) are fast curing, anaerobic thread locking formulation for bonding and sealing threads for refrigerant systems. 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. This specific formulation provides optimum strength and chemical resistance, plus highly resistant to heat and vibrations making it the recommended formulation for refrigerant systems.

# **Application**

NuLock formulation 4289-02/-05 is a refrigerant thread sealant and locking formulation particularly suited for metal fasteners in refrigerant systems. Use this formulation in other applications where maximum strength and chemical resistance is desired. Ideal for sealing and locking of flare fittings used in refrigeration and ductless air conditioning systems. Other applications of NuLock include metal pipe threaded fittings, compression fittings or other fasteners such as bolt/nut assemblies, screws and threaded metal studs. For metal fasteners up to two inches in diameter. Product prevents rusting of threads. Use standard 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.

# **Specialty Products**

# NuLock™



## **Packaging**

50ml bottle **4289-02** 10ml bottle **4289-05** 

# **Properties**

Composition: Methacrylate ester

Appearance: Red liquid

Viscosity: 2,500 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: 10-30 minutes Functional Cure Time: 2-4 hours

Full Cure: 24 hours

Breakaway Torque, ISO 10964:

• M10 steel nuts and bolts: 108 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 noticed 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 time for NuLock is 10+ minutes. The product functionally cures in 2-4 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).

