Highside Chemicals

Highside Chemicals' Leak Lock, distributed by Motors & Armatures, Inc. (MARS), is the premier pipe joint sealant designed for HVAC and refrigeration professionals. Engineered for durability and chemical resistance, Leak Lock ensures fluid-tight seals across diverse materials and systems, from refrigeration lines to industrial gas pipelines. Trusted by technicians since its creation in 1937, Leak Lock delivers reliable performance, safety, and ease of use in demanding applications.

Ratings

- Pressure Range: Full vacuum to 10,000 psi
- Temperature Range: -200°F to +400°F
- Toxicity: Nontoxic & potable water safe

Common Uses

Leak Lock® excels in diverse applications, from sealing Schrader valves, O-rings, and compressor oil lines to providing a vibration-resistant lock on threads and flanges. It's trusted for joining dissimilar materials, ensuring a tight seal on flare and hydraulic fittings, and securing mating surfaces and connections.

How to Apply

To ensure a reliable seal with Leak Lock, follow these steps:

1. Clean Surfaces: Remove dirt, oil, or debris from joint surfaces using a suitable cleaner.
2. Apply Sealant: Use the provided applicator brush to apply Leak Lock evenly to both mating surfaces. (ensure leak lock gets fully into the threads of threaded joints)
3. Allow Tack Development: Wait 20 minutes for the outer surface to "film" over before assembling.
4. Assemble Joint: Align and tighten the joint, applying appropriate torque. The system is now ready to function—pulling a vacuum, charging, and operating the system are now possible.
5. Full Cure: Allow 20 minutes to 24 hours for curing, depending on pipe size and ambient temperature.

Safety Tips:

- Wear gloves and ensure ventilation during application.
- Store in a sealed container to preserve shelf life.
- Avoid over-application to prevent excess squeeze-out.
- Exercise caution to ensure that excess Leak Lock does not get into the system.

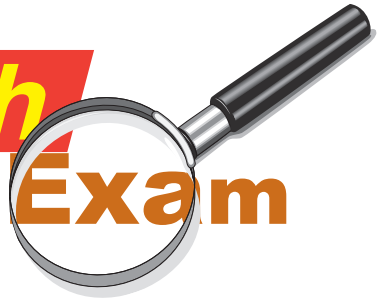
Common Resistances

Leak Lock® delivers a reliable seal across multiple applications, resisting leaks from refrigerants, oils, solvents (including mineral spirits, lacquer thinners, and chlorinated solvents), and various industrial gases and fuels. It performs effectively with gases like acetylene, fluorine, hydrogen, nitrogen, and nitrous oxide, and fuels such as gasoline, diesel, kerosene, propane, LPG, LNG, and natural gas. However, it's not recommended for alcohols, glycols, or concentrated caustic, acid, or base solutions.

Types of Leak Lock

Leak Lock is available in Standard and Gold. For high-torque applications, Leak Lock Gold is recommended due to its Teflon content. All other applications and procedures are identical for both versions. In AC and refrigeration applications, there is typically no benefit to using one variant over the other. Some technicians prefer use of Gold due to its Teflon content in natural gas applications.

MARS® Tech Proficiency Exam



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Name _____ Company _____

Address _____

MARS Sales Rep _____

When completed, please fax to: 631-348-7160

Choose the best answer.

1. Leak Lock is primarily a:

a) Thread and Joint sealant
b) Solder Flux
c) Oil additive
d) Thread Locker

2. What is the maximum pressure that Leak Lock is rated for?

a) 1,000 psi
b) 5,000 psi
c) 10,000 psi
d) 15,000 psi

3. Before applying Leak Lock, the joint surfaces should be:

a) Lightly oiled
b) Sanded
c) Cleaned of dirt, oil, and debris
d) Heated to 150°F

4. To apply Leak Lock, you should:

a) Assemble the joint, then wipe on Leak Lock
b) Apply Leak Lock to one side only
c) Coat both mating surfaces fully, wait 20 mins, then assemble
d) Throw it away

5. Which of the following is NOT a recommended application for Leak Lock?

a) Schrader valves
b) O-rings
c) Refrigerant lines
d) Alcohol-based systems

6. What precaution should be taken to prevent contamination of HVAC/R systems?

a) Apply multiple thick coats of Leak Lock
b) Allow excess Leak Lock to enter refrigerant lines
c) Avoid over-application and prevent sealant from entering the system
d) Always apply Leak Lock after charging the system

7. Which of the following substances is Leak Lock resistant to?

a) Glycols
b) Refrigerants
c) Concentrated acids
d) Alcohols

8. Which version of Leak Lock contains PTFE (Teflon)?

a) Leak Lock Ultra
b) Leak Lock Pro
c) Leak Lock Gold
d) Leak Lock Silver

9. Leak Lock is NOT recommended for oils.

1) True
2) False

10. A joint sealed with Leak Lock cannot be disassembled

1) True
2) False