



Advanced Fastening and Sealing Technologies

EXPAND-A-LOCK®

Expand-A-Lock is a unique pre-applied microencapsulated expanding threadlocking and sealing compound. Expand-A-Lock increases in volume 20 to 50% on installation, penetrating the gaps in fastener threads that are typically unfilled by conventional threadlockers. Pre-Applied to fasteners, Expand-A-Lock arrives dry to the touch and ready for assembly.



PRODUCT INFORMATION

How It Works

Expand-A-Lock contains a microencapsulated epoxy resin and expanding compounds suspended in a hardener. The forces of engagement crush the microscopic capsules of epoxy resin and expansion agent, mixing the separate reactant components, and initiating a chemical reaction. As the reaction is taking place, the material expands, filling the fastener thread gaps while hardening.



Problem Solver

Many threadlockers fail when used in less than optimal conditions, such as misfit parts or threadformed screws. Because of its expansion properties, Expand-A-Lock can overcome these limitations.



Strongest Lock Available

Expand-A-Lock has been shown to provide some of the highest break away torques of all our reactive threadlocking materials.



Surface Insensitive

Expand-A-Lock is compatible with most fastener sizes, configurations, materials and finishes. Its epoxy formulation insures that a strong reliable lock and seal are formed.



Low Prevailing on Torque

Compared to patch threadlockers, Expand-A-Lock has minimal on-torque and assembles easily with common hand tools.



Resists Chemicals

A cross-linked molecular structure makes it one of the most resistant types of adhesives. Oil, gasoline, salt spray, acids, solvents, and water have virtually no effect on parts when introduced after final cure.



Surpasses IFI Standards

Expand-A-Lock meets or exceeds all torque requirements of IFI 125, IFI 525, as well as automotive adhesive coated fastener performance specifications.

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CERTIFICATIONS & ACCREDITATIONS
AS9100:2009, Rev. C • QPL-18240F • QSLM
ITAR • ISO-9001:2008 • ISO/IEC 17025:2005
CE Directive 2006/42/EC • ISO-14121
ISO-12110-1/12110-2 • IEC-EN 60204-1

EXPAND-A-LOCK®



PROCESS BENEFITS

Saves Time: Fasteners coated with Expand-A-Lock can be automatically fed through standard feeding devices – speeding up your process and improving productivity.

Saves Money: The bulk pre-application of Expand-A-Lock to fasteners 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 Expand-A-Lock fasteners are coated to specification, insuring consistent performance, unlike the variation from hand applying bottled products.

Reliability: Under most operating conditions, Expand-A-Lock is unaffected by vibration or reversal of stress and greatly reduces the need to re-tighten fasteners.

PRODUCT APPLICATIONS

Use Expand-A-Lock to seal critical applications where shock, vibration and fluid pressure cause the fastener to loosen or the joint to leak. Typical applications include: Marine Ride Plates, Head Bolts, Engine Plugs and bolts, Pipe Fittings, Air fitting connectors.

APPROVED SPECIFICATIONS

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

- General Motors: GM9986339
- IFI: 125, 525
- DIN: 267 Part 27

OTHER NOTES

- Under typical conditions, Expand-A-Lock has a fixture time of 15 minutes with a full cure in 24 hours.
- Expand-A-Lock is normally applied one to three threads back from the end of a fastener to assure ease of starting.