



Product Description

Expand-A-Lock is a unique expanding thread sealing and locking epoxy compound. Expand-A-Lock is designed for hard to seal threaded assemblies. Expand-A-Lock works by expanding upon assembly to increase the material volume by 20 to 50%. This increase in volume fills all voids in the assembly. The product performs in both straight and tapered pipe threads on aluminum, steel, plated, stainless steel, and special alloy parts. Expand-A-Lock exhibits excellent temperature and solvent resistant.

Typical Applications

Expand-A-Lock will lock and seal fasteners. Expand-A-Lock is used to seal critical applications where shock and vibration may cause the fastener to loosen. Typical Applications include engine pipe plugs, air fitting connectors, compressor fittings, and cooling connectors.

Performance of Cured Material

Fixture Time 60 min @ 72°F
 Full Cure Time 24 hrs @ 72°F
 Temperature Range -60°F to 300°F
 (-51°C to 150°C)

Breakaway Strength Typical Values

M-10 Phosphate oil bolt Zinc Test Nut @24 hr	37 N-m
M-10 Zinc plate bolt Zinc Test Nut @24 hr	34 N-m
M-10 Zinc Dichromate bolt aluminum nut @24 hr	25 N-m

Environmental and Fluid Resistance

Tests were conducted on M-10 x 1.5 phosphate-oil, zinc plate and zinc dichromate bolt into an aluminum test block drill tapped to a 8.676 mm minor diameter. The block was 19 mm thick. Coated parts were assembled into the Aluminum block and submersed in the fluid for 30 days; the parts were tested for sealing while at temperature and tested for breakaway strength at Room Temperature.

(Shear strength values)

Typical Values	Seals
Engine oil @ 150°C 100%	Pass
Brake fluid @ 150°C 98%	Pass
ATF @ 150°C 100%	Pass
50/50 water/ ethylene glycol @ 120°C 100%	Pass
Gasoline @ 25°C P 88%	
Diesel Fuel @25°C 100%	Pass

General Information

Storage

Product should be stored in a cool and dry location at temperatures between -10°C to 30°C. Optimal storage is 22±4°C. Shelf life is 18 months from date of manufacture when stored at 22±4°C.

Note

The data are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.

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