UNI-PATCH® 688

An environmentally sustainable pre-applied thread locker

UNI-PATCH® 688 is a water based, room-temperature curing, microencapsulated adhesive thread locker. It can be applied to almost all thread sizes (as small as M0.8), configurations, compositions and finishes. It contains microencapsulated reactive elements that are suspended in a quick-curing resin, carried in a water medium.

During assembly, the shearing forces acting on the capsules, caused by installation of the fastener to the mating part, breaks and releases reactive compounds that cure into a tough, well-bonded polymer. The resulting matrix rapidly bonds the surfaces, semi-permanently locking parts together. The bonded surfaces in the threads provides heat, fluids, vibration, thermal and mechanical shock resistance to the assembled joint.

Uni-Patch® 688 offers consistent torque values and requires no heating or primers for curing.

Product Characteristics

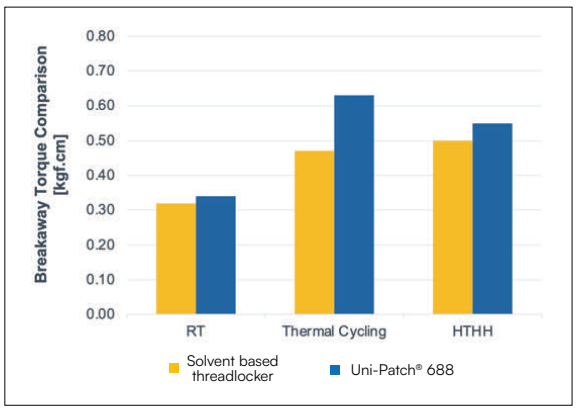
Characteristics	Description
Chemical type	Epoxy adhesive (Water based formulation for low VOC and environmentally friendly)
Appearance	Blue (Standard)
	Other colours are available, please check with for options available.
Re-usability	Recommended single use only for best thread locking performance. Reusability may be established through application testing on a case by case basis.
Coating position and thread size	Position is customisable. For M2.0 to M0.8
Coating radial coverage	360°

Features & Benefits

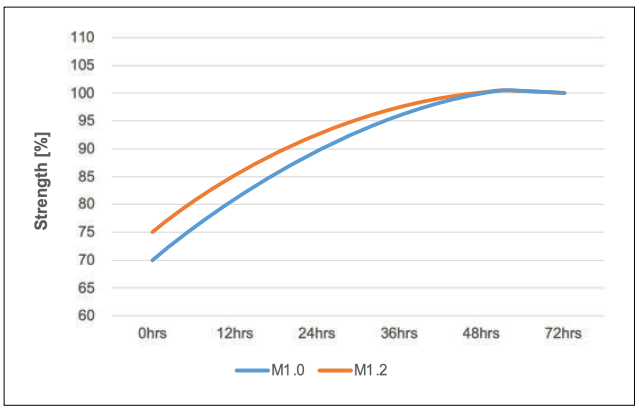
- Resists and seals against most fluids. Oil, water, antifreeze and gasoline have almost no effect once final cure has been achieved
- Provides good loosening torque performance when subjected to thermal and vibration conditions
- Under typical condition, fixture is achieved within 12 hrs. Required min. 48 hrs upon installation to achieve optimal bonding strength
- More time saving and cost effective than applying bottled thread locking compounds at the point of assembly
- Long shelf life after applied to threads, ready for assembly. Allows convenient handling at point of assembly
- Meets RoHS requirements, non-toxic, VOC-free
- Able to survive operating temperatures from -40°C to 175°C after assembled

Technical Data

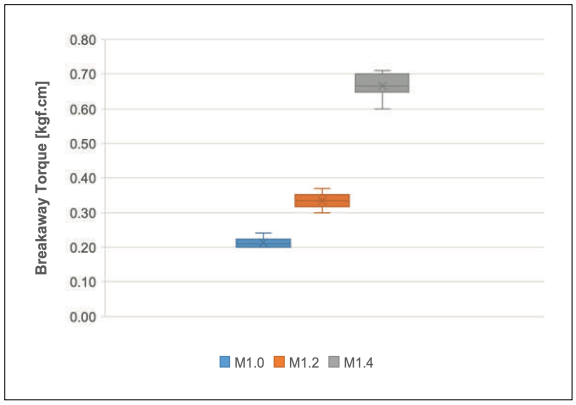
Breakaway Torque
M1.2x0.25-2.00L (Unit: Kgf.cm)



Cure Time Study
Curing Process



Range of Breakaway Torque
M1.0 & M1.2 & M1.4 (3 threads engagement)



Vibration
M1.4x0.30-2.00L