

KT432

Thread Locker

Description

KT432 Thread locker is a general purpose, medium-high strength, thixotropic anaerobic thread locker. The product cures when confined in the absence of air on close-fitting metal surfaces.

KT432 is formulated to lock all metric and imperial nuts and bolts, preventing vibration loosening and leakage through the threads. KT432 is slightly oil tolerant, so it will bond some 'as received' parts, but best results are obtained with clean substrates. The thixotropic nature of the product prevents run off, dripping and migration after assembly. KT432 is typically used on mounting bolts, housing screws, etc. KT432 prevents corrosion of assembly parts.

Typical Properties of Uncured Material

Chemical Type		Dimethacrylate
Appearance		Blue
Specific Gravity		1.04
Viscosity cPs	(Range)	10,000-18,000
	(Typical Value)	14,000
	(Range) ²	2,500-4,000
	(Typical Value) ²	3,300
Breakaway Torque (N.m)	range	12-25
	typical	19
Prevail Torque (N.m)	range	5-15
	typical	10
Fixture Time (mins)		<15
Full Cure @20°C (hours)		24
Flash Point (°C)		>100
Max Gap Fill (mm)		.25
Operating Temp Range (°C)		-50 to +150

Typical curing speed⁴, % of final strength:-

15 mins	Finger tight
1 hour	~50% strength
24 hours	100% strength

Cure Speed Influence

Cure speed and strength vary according to the substrates. When used on mild steel and brass components, anaerobic adhesives will reach full strength more rapidly than more inert materials such as stainless steel and zinc dichromate. Krylex Activators may be used to accelerate cure speed.

The size of the bond gap greatly affects the speed of cure of anaerobic adhesives. Bond gap varies with tread type and size of the fastener. The larger the gap between threads, the slower the cure speed.

All figures relating to cure speed are tested at 22°C. Lower temperatures will result in a slower cure. Heating the assembled parts accelerates the curing process. Krylex Activators should be used when the temperature is less than 5°C.

When speed of cure is too slow or the bond gap is very large, Krylex Activators may be used to accelerate cure speed. The use of an accelerator may reduce bond strength by up to 30%. Chemence recommends testing on the parts to measure the effect.

Typical Environmental Resistance

Krylex anaerobic adhesives exhibit excellent chemical resistance to most oils and solvents including motor oil, leaded petroleum, brake fluid, acetone, ethanol, propanol and water. Anaerobic adhesives and sealants are not recommended for use in pure oxygen or chlorine lines.



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Instructions for Use

Ensure parts are clean, dry and free from oil and grease.

Apply adhesive to all engaged threads. Assemble parts and allow curing. Wipe excess adhesive from outside of joint.

Product is normally hand applied from the container. Dispensing systems are available for high volume assembly applications. Please contact your Krylex representative for further advice on dispensing solutions.

Storage

Store in a cool area out of direct sunlight. Refrigeration to 5° gives optimum stability.

General Information

For safe handling of this product consult the Material Safety Data Sheet.

Anaerobic adhesives only cure in the absence of air and with metal part activation. Adhesive outside the joint will remain uncured and may be wiped away with a cloth.

Anaerobic adhesives are not recommended on certain plastics as stress cracking can sometimes result. Some anticorrosion chemicals inhibit the cure system in this type of anaerobic. Trials are recommended to establish whether cleaning of the parts are necessary. Krylex Activators may be required on plated parts and inactive metals.

Notes

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and area verified on a regular basis.

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