



RITE-LOK™ Anaerobic Threadlocker TL42

Product Data Sheet

Updated : March 2007
Supersedes : New

Product Description RITE-LOK TL42 is a general purpose, medium strength, thixotropic anaerobic threadlocker. The product cures when confined in the absence of air on close-fitting metal surfaces.

Key Features RITE-LOK TL42 is formulated to lock all metric and imperial nuts and bolts, preventing vibration loosening and leakage through the threads. TL42 is designed for use on parts where disassembly with hand tools for servicing is required. The thixotropic nature of the product prevents run off, dripping and migration after assembly. Once applied, parts slip together easily, lubricated by the adhesive. TL42 prevents corrosion of assembled parts.

Physical Properties

Chemical Type	Dimethacrylate
Appearance	Blue
Specific Gravity	1.04
Viscosity cPs (Brookfield RVT, spindle 2, 2.5rpm)	Range 4,000-6,000 Typical Value 5,000
Viscosity cPs (Brookfield RVT, spindle 2, 20rpm)	Range 1,000-2,000 Typical Value 1,500

Performance Characteristics

Maximum Gap Fill	0.25mm
Fixture Time	≤15mins
Full Cure	24hrs
Strength Build Up	15 mins = finger tight 1 hour = ~50% strength 24hours = 100% strength
Breakaway Torque N.m (ISO 10964)	Range 8 – 18 Typical 15
Prevail Torque N.m (ISO 10964)	Range 2 – 10 Typical 7
Chemical compatibility	Anaerobic adhesives and sealants should not be used in pure oxygen or chlorine lines.
Service Temperature Range	-50 to +150°C

Additional Product Information	<p>Aerobic 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.</p> <p>TL42 is suitable for most medium and coarse-threaded screws, nuts and bolts. Not recommended on certain plastics as stress cracking can sometimes result. Some anti-corrosion chemicals inhibit the cure system in this type of anaerobic. Trails are recommended to establish whether cleaning of the parts is necessary. AC64 Activator may be required on plated parts.</p>
Application Techniques	<p>Ensure parts are clean, dry and free from oil and grease. Apply adhesive to all engaged threads. Assemble parts and allow to cure. Wipe excess adhesive from outside of joint. Heating the assembled parts accelerates the curing process.</p> <p>AC64 Activator may be used to accelerate cure and should be used if the application temperature is below 5°C. The use of an accelerator may reduce the final bond strength by up to 30%</p>
Storage Conditions	<p>Keep the adhesive in a cool, dry place away from direct sunlight. Under such conditions shelf life at room temperature will be 12 months.</p> <p>Refrigeration to 5°C gives optimum storage stability.</p>
Shelf Life	12 months from date of despatch by 3M when stored in the original carton at 21°C
Precautionary Information	Refer to product label and material Safety Data Sheet for health and safety information before using the product. For information please contact your local 3M Office. www.3M.com
For Additional Information	To request additional information or to arrange for sales assistance, call 0870 6080050 Address correspondence to: 3M United Kingdom PLC, 3M House, 28 Great Jackson Street, Manchester, M15 4PA
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Industrial Adhesives & Tapes Division

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