

TECHSIL® MEDIUM STRENGTH BLUE NUT LOCK 50ML

Techsil[®] Medium Strength Blue Nut Lock is designed for the sealing and locking of threaded fasteners which may require disassembly with standard handtools. The product is a single component anaerobic, medium strength thixotropic, acrylic based threadlocker. The product cures when confined in the absence of air between close fitting metal surfaces and prevents leakage and loosening from vibration and shock.

Physical Properties

Property	Value			
Technology	Acrylic			
Uncured Appearance	Blue Liquid			
Chemical Form	Dimethacrylate ester			
Fluorescence	Positive under UV			
Cure	Anaerobic			
Secondary Cure	Activator			
Components	Single – requires no mixing			
Viscosity	Thixotropic, medium			
Strength	Medium			
Application	Threadlocking			

Techsil[®] Medium Strength Blue Nut Lock is particularly suitable for uses on less active substrates such as plated surfaces, where disassembly is required with handtools.

Property	Test Method	Value		
Uncured Product				
Specific Gravity @ 25°C		1.0		
Viscosity @ 25°C		1200-1500 cPs		
Flash Point		See MSDS		
Fixture Time		10-15 mins		

Cure speed vs. substrate

The rate of cure is dependent on substrate used. The graph below shows the breakaway strength developed with time on M10 steel bolts and nuts compared to different materials and tested according to ISO 10964.



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Cure speed vs. temperature

The rate of cure is dependent on the ambient temperature. The graph below shows the breakaway strength developed with time at different temperatures on M10 steel bolts and nuts and tested according to ISO 10964.



Cure speed vs. activator

Where the cure speed is unacceptably long or large gaps are present. An activator can be applied to the surface which will improve cure speed.

Typical performance of cured material

	Typical Value	
Operating temp °C	-54°C - 150°C	

(After 24 hr at 20-25°C) on M10 steel nuts & bolts)

	Typical Value
Breakaway torque M10 steel bolts and nuts ISO 10964	17Nm
Prevail Torque M10 steel bolts & nuts ISO 10964	5Nm

Heat aging

Aged at temperature indicated and tested at 22°C



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Chemical/Solvent Resistance

Aged under conditions indicated and tested @ 22 °C.

	% of initial strength				
Environment	°C	100 H	500H	1000 0H	5000h
Motor oil (MIL-L-46152)	125	100	95	90	85
Leaded Petrol	22	95	95	95	95
Brake Fluid	22	95	95	95	90
Water/Glycol 50/50	87	80	80	80	80
Ethanol	22	95	95	90	90
Acetone	22	100	90	90	90

General information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used with chlorine or other strong oxidising materials. For information on the safe handling of this product, Consult the Material Safety Data Sheet, (MSDS).

Directions for use

- 1. For optimum performance surfaces should be clean and free of grease.
- 2. If the material is an inactive metal consider using activator.
- 3. Shake the product thoroughly before use.
- 4. Apply several drops to the bolt & nut.
- 5. Assemble and tighten as required.
- 6. To prevent the clogging of the nozzle, do not let the tip touch metal surface during application.

For disassembly

- 1. Remove with standard hand tools.
- 2. In circumstances where hand tools do not work, use localized heat to bolt or nut, disassemble while hot.

For cleanup

1. To remove cured product use a combination of solvent and abrasion such as a wire brush.

Precaution

- 1. Use with proper ventilation. Avoid contact with skin and eyes.
- 2. If contact with skin occurs, rinse with warm water or dissolve gradually with appropriate de-bonder.
- 3. Do not try to remove forcibly.
- 4. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
- 5. Keep well out of reach of children.

Storage

Keep adhesive in a cool, dry place $20-25^{\circ}$ C). For long term storage, refrigeration (5_oC or 40_oF) is recommended unless otherwise labelled. To prevent contamination of unused material, do not return any product to its original container.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their particular use.

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