

PRODUCT SPECIFICATION

500-TL

Anaerobic Adhesive

Description:

Designed for the sealing and locking of threaded fasteners, this single-component anaerobic threadlocker is a high-strength, thixotropic, acrylic-based formulation. The product cures when confined in the absence of air between close-fitting metal surfaces, preventing leakage and securing assemblies against loosening caused by shock and vibration.

Typical Properties of Cured/Uncured Material:

Uncured State Physical Properties			
Base	Acrylic	Viscosity	Low
Colour	Green Liquid	Strength	High
Chemical Form	Dimethacrylate ester	Application	Threadlocking
Cure	Anaerobic	Specific Gravity @ 25°C	1.10
Fluorescence	Positive under UV	Viscosity @ 25°C	400-600 cPs
Secondary Cure	Activator	Flash Point	See MSDS
Components	Single – Requires no mixing	Fixture Time	15 mins

Typical Performance of Cured Material	
(After 24 hr at 20-25°C) on M10 steel nuts & bolts)	-54°C - 150°C
Breakaway Torque M10 steel bolts & nuts ISO 10964	26Nm
Prevail Torque M10 steel bolts & nuts ISO 10964	36Nm

Chemical and Solvent Resistance

Aged under the specified conditions and tested at 22°C.

General Information

This product is not recommended for use in pure oxygen or oxygen rich systems, nor should it be used in the presence of chlorine or other strong oxidising agents. For detailed guidance on safe handling, consult the Safety Data Sheet (SDS).

Where aqueous washing systems are used to clean surfaces prior to bonding, verify the compatibility of the cleaning solution with the adhesive. In certain instances, residual washing solutions may adversely affect both cure speed and final performance.

Environment	°C	% of initial strength		
		100 h	500 h	1000 h
Motor oil (MIL-L-46152)	125	85	85	75
Leaded Petrol	22	100	100	100
Brake Fluid	22	100	100	100
Ethanol	22	95	95	95
Acetone	22	95	95	95
Water/Glycol 50/50	87	85	85	85

PRODUCT SPECIFICATION

500-TL

Anaerobic Adhesive

Directions For Use:

1. For optimum performance, all surfaces, both internal and external, must be clean and free of grease.
2. When working with inactive metals, consider applying a suitable activator.
3. Assemble and tighten parts as required.
4. For shrink fitted assemblies, apply the product to the pin and heat the collar to create sufficient clearance for free assembly.
5. For slip fitted assemblies, apply the product inside the collar and around the leading edge of the pin, using a rotating motion during assembly to ensure complete coverage.
6. For press fitted assemblies, apply the product to both mating surfaces and ensure rapid press speeds during assembly.

Disassembly

Where standard hand tools prove ineffective, apply localized heat directly to the bolt or nut and disassemble while hot.

Clean Up

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

Handling & Storage:

Storage

Keep the product in its original, unopened container in a cool, dry location, ideally between 8 and 21°C. Temperatures below 2°C can adversely affect product properties. Do not freeze. Ensure the container remains tightly closed until ready for use.

Handling

Material removed from the container may become contaminated during use. Do not return any unused product to the original container. Improper handling or misuse of the product will invalidate all warranties.

Precaution:

1. Ensure adequate ventilation during use and avoid contact with skin and eyes.
2. In the event of skin contact, rinse thoroughly with warm water or use a suitable debonder to dissolve the adhesive. Do not attempt to force the skin apart.
3. If the product enters the eye, hold the eye open and wash thoroughly with water. Seek medical advice immediately.
4. Keep out of the reach of children.
5. Store in a cool, dry location between 8 and 21°C.

Disclaimer:

The data contained herein are furnished for informational purposes only and are believed to be reliable. However, The company does not assume responsibility for any results obtained by persons over whose methods The company has no control. It is the user's responsibility to determine the suitability of The company products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any The company products. The company specifically disclaims all warranties express or implied, including warranties of saleability and suitability for a particular purpose arising from sale or use of The company products. The company further disclaims any liability for consequential or incremental damages of any kind including lost profits.