



TDS

MXLOC[®] RETAIN 80

PRODUCT SPECIFICATION

MXLOC[®] RETAIN 80

Description:

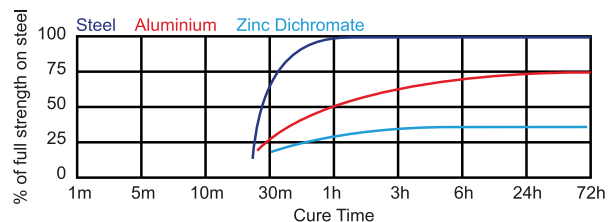
MXLOC[®] RETAIN 80 is designed for the bonding of cylindrical fitting parts and is particularly good where low viscosity is needed. The product is a single component anaerobic, acrylic based product. The product cures when confined in the absence of air between close fitting metal surfaces and prevents leakage and loosening from vibration and shock.

Typical Properties of Cured/Uncured Material:

Uncured State Physical Properties		Uncured State Physical Properties	
Base	Acrylic	Specific Gravity @ 25°C	1.11
Colour	Green Liquid	Viscosity @ 25°C	1250 - 2000 mPas
Chemical Form	Dimethacrylate ester	Flash Point	See MSDS
Cure	Anaerobic	Typical Performance of Cured Material	
Fluorescence	Positive under UV		
Secondary Cure	Activator	Operating Temperature	Typical Value
Components	Single – Requires no mixing	(After 24hr at 20-25°C)	-54°C - 150°C
Viscosity	Medium	Shear strength steel collars and pins ISO 1010123	>19.3Nm
Strength	High		
Application	Retaining		

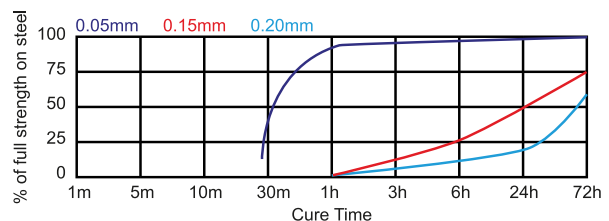
Cure Speed vs Substrate

The rate of cure is dependent on substrate used. The graph to the right shows the breakaway strength developed with time on steel collars and pins compared to different materials and tested according to ISO 101123



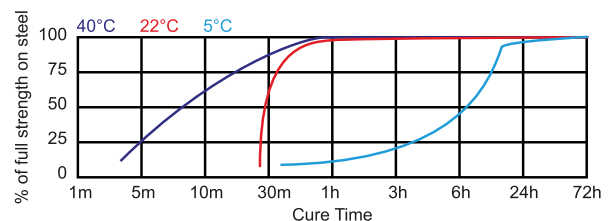
Cure Speed vs Bond Gap

The rate of cure is dependent on bond gap. The graph to the right shows shear strength developed with time on steel collars and pins compared to different controlled gaps and tested according to ISO 10123



Cure Speed vs Temperature

The rate of cure is dependent on the ambient temperature. The graph to the right shows shear strength developed with time on steel collars and pins compared to different controlled gaps and tested according to ISO 10123

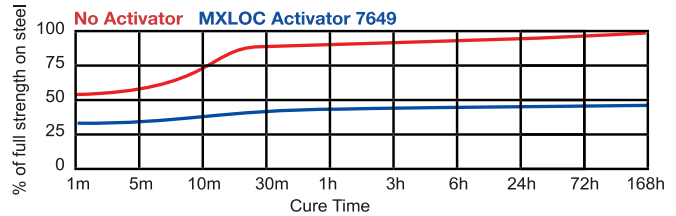


PRODUCT SPECIFICATION

MXLOC® Retain 80

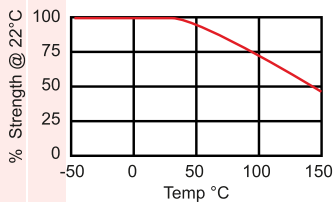
Cure Speed vs Activator

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

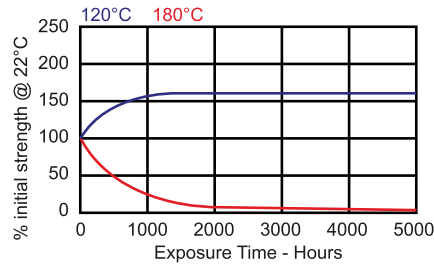


Typical Heat Resistance

Hot Strength Tested at Temperature



Heat Aging Aged at temperature indicated and tested at 22°C



Chemical/Solvent Resistance

Aged under conditions indicated and tested @ 22°C

Environment	°C	% of initial strength		
		100 h	500 h	1000 h
Motor oil (MIL-L-46152)	125	100	100	100
Unleaded Petrol	22	100	100	100
Brake Fluid	22	80	75	75
Ethanol	22	95	95	95
Acetone	22	80	80	80
Water/Glycol 50/50	87	100	90	80

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).** Where washing systems are used to clean the surfaces before bonding, it is important to check the compatibility of the washing solution with the adhesive. In some cases, these solutions can affect the cure and performance of the adhesive.

Revision date: 01/2025 - Revision: 04



PRODUCT SPECIFICATION

MXLOC® Retain 80

Directions For Use:

1. For optimum performance surfaces should be clean and free of grease (internal and external).
2. If the material is an inactive metal consider using activator.
3. Assemble and tighten as required.
4. For shrink fitted assemblies the product should be applied onto the pin, the collar should then be heated to create clearance for free assembly.
5. For slip fitted assemblies the product inside of the collar then to the leading edge of the pin, then use a rotating motion in assembly to ensure coverage.
6. For press fitted, apply product to both surfaces making sure of assembly at high press rates.

For disassembly

1. In circumstances where hand tools do not work, use localised 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.

Handling & Storage

Storage: Keep products in the unopened container in a cool dry location. The product is best when stored at 20 to 25°C. temperatures less than 2°C can adversely affect product properties. Do not freeze. Keep container tightly closed until ready for use. For long term storage keep in refrigeration at 5°C unless otherwise labelled.

Handling: Material removed from containers may be contaminated during use. Do not pour back any product to the original Container. Misuse of product will void all warranties.

Precaution

1. Use with proper ventilation. Avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve with appropriate debonder. Do not try to remove forcibly.
3. If adhesive gets into your eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
4. Keep well out of reach of children.
5. Keep adhesive in a cool dry place 8 to 21°C.

Disclaimer:

The data contained herein are furnished for informational purposes only and are believed to be reliable. However, Cartell UK Ltd does not assume responsibility for any results obtained by persons who methods Cartell UK Ltd has no control. It is the responsibility to determine the suitability of Cartell UK's 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 Cartell UK Ltd's products. Cartell UK Ltd specifically disclaims all warranties express or implied, including warranties of salability and suitability for a particular purpose arising from sale or use of Cartell UK Ltd's products. Cartell UK Ltd further disclaims any liability for consequential or incremental damages of any kind including lost profits.

Revision date: 01/2025 - Revision: 04