

Technical Data Sheet MXLOC® 13554

Revision Date: 21, Aug. 2019

Revision: EN001

PRODUCT DESCRIPTION

MXLOC® 13554 is designed for the sealing and locking of metal fittings and pipes. It provides solvent resistance on threaded fittings and pipe up to 50 mm in diameter. 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.

Technology	Acrylic
Chemical Type	Methacrylate ester
Appearance (uncured)	Red liquid
Components	One component –
	requires no mixing
Viscosity	Medium
Cure	Anaerobic
Secondary Cure	Activator
Application	Thread sealing
Fluorescence	Negative

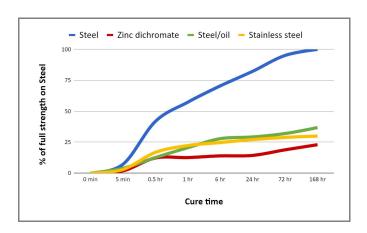
TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.0	
Flash Point -	See SDS	
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP)		
Spindle 3, 20 rpm	1,500 to 3,500	

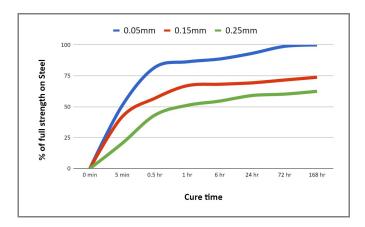
TYPICAL CURING PERFORMANCE

Cure Speed vs. Substrate

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

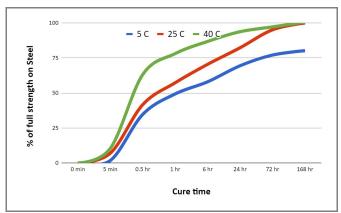


threaded fasteners depends on thread type, quality and size. The following graph shows shear strength developed with time on steel pins and collars at different controlled gaps and tested according to ISO 10123.



Cure Speed vs. Temperature

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



Cure Speed vs. Activator

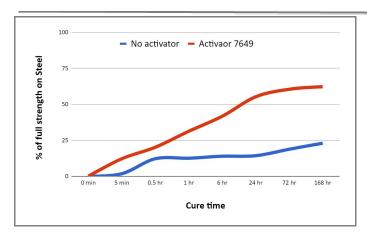
Where cure speed is unacceptably long, or large gaps are present, applying activator to the surface will improve cure speed. The graph below shows the breakaway strength developed with time on M10 zinc dichromate steel nuts and bolts using Activator 7649 and tested according to ISO 10964.

Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. Gaps in



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TYPICAL PERFORMANCE OF CURED MATERIAL

Operating temperature -54 °C~150 °C Pressure resistance 10,000 psi

Adhesive Properties - Torque

Cured for 24 hrs @ 22 °C

Breakaway Torque, ISO 10964, Unseated:

Bonding Identical Substrate	N. m	lb.in.
M10 steel nuts and bolts	27.4	243
M10 Zinc dichromate nuts and bolts	5.4	48

Prevail Torque @ 180°, ISO 10964, Unseated:

Bonding Identical Substrate	N. m	lb.in.
M10 steel nuts and bolts	12.0	106
M10 Zinc dichromate nuts and bolts	7.4	66

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be use with chlorine or other strong oxidizing materials.

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. This product is not recommended for use on certain plastics. Users are recommended to confirm compatibility of the product with such substrates.

Storage & Handling precaution

Keep adhesive in a cool and dry place. The storage temperature is recommended at 8 °C - 24 °C. For details, consult the Material Safety Data Sheet, (MSDS). Shelf life is twelve months from the date of manufacture in the original container under the optimal conditions.

- 1. Avoid contact with skin and eyes.
- 2. If contact with skin, rinse with water.
- If adhesive gets into eye, keep eye open and rinse with water thoroughly. Seek medical attention immediately.
- 4. Keep the material out of children's reach.

Directions for use

For assembly

- The substrate surfaces must be clean and free of grease.
- 2. Shake the product thoroughly before use.
- 3. If the cure speed is too slow, consider using activator.
- 4. Apply several drops to the nut & bolt.
- 5. Assemble and tighten as required.
- 6. To prevent the clogging of the bottle nozzle, do not let the tip touch the metal surfaces during application.

For disassembly & cleanup

- Use localized heat (250 °C) to nut and bolt, disassemble while hot.
- 2. Use a wire brush to clean the charred product.

Note

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