

### PRODUCT DESCRIPTION

MXLOC<sup>®</sup> 13565 is designed for the sealing and locking of metal fittings and pipes. The product is a single component anaerobic, thixotropic, 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.

<b>Technology</b>	Acrylic
<b>Chemical Type</b>	Methacrylate ester
<b>Appearance (uncured)</b>	White to off-white paste
<b>Components</b>	One component – requires no mixing
<b>Viscosity</b>	High
<b>Cure</b>	Anaerobic
<b>Secondary Cure</b>	Activator
<b>Application</b>	Thread sealing
<b>Strength</b>	Low

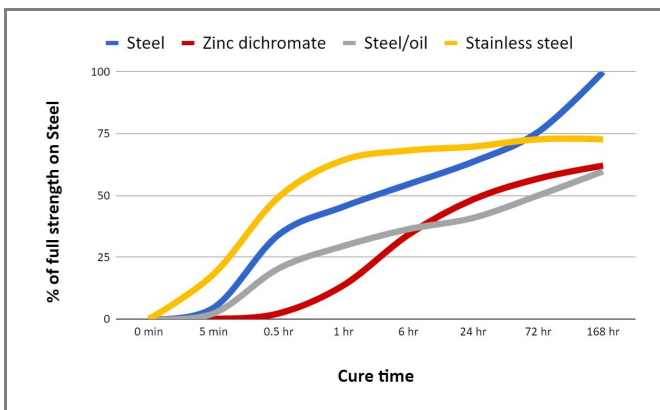
### TYPICAL PROPERTIES OF UNCURED MATERIAL

<b>Specific Gravity @ 25 °C</b>	1.1
<b>Flash Point -</b>	See SDS
<b>Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP)</b>	
<b>Spindle 7, 2 rpm</b>	175,000 to 525,000

### TYPICAL CURING PERFORMANCE

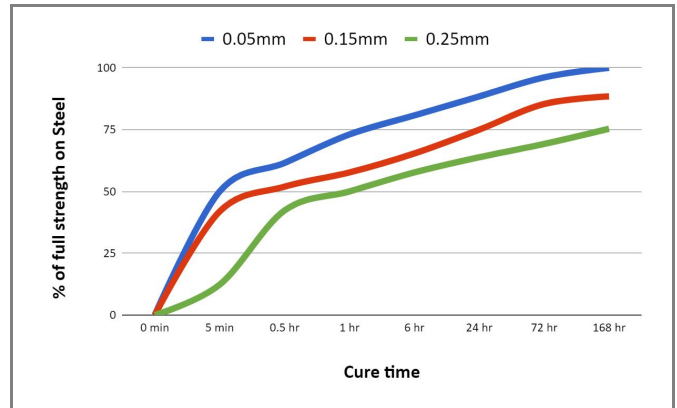
#### Cure Speed vs. Substrate

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.



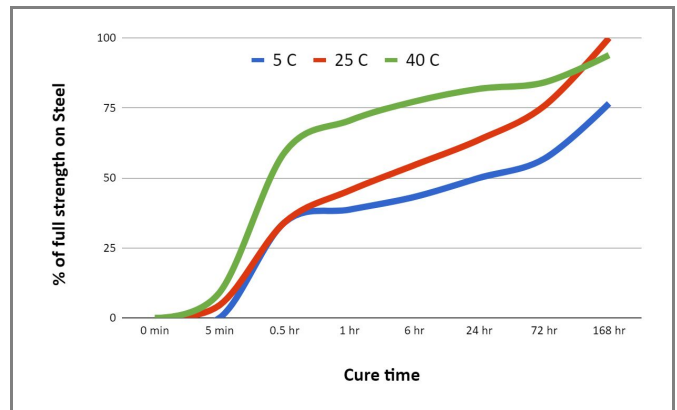
#### Cure Speed vs. Bond Gap

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



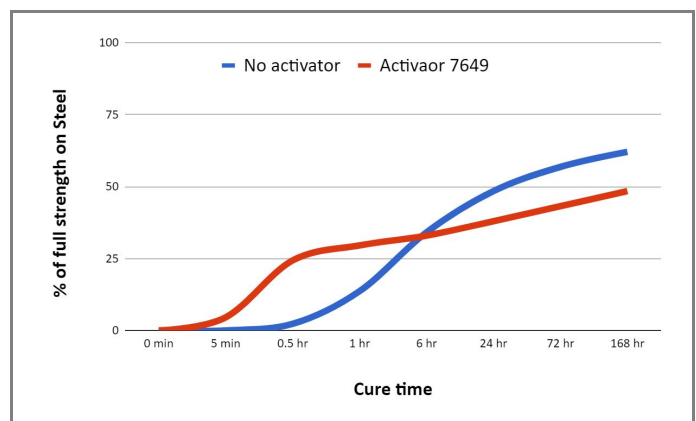
#### Cure Speed vs. Temperature

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.



**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	2.8	25
M10 Zinc dichromate nuts and bolts	2.5	22

Prevail Torque @ 180°, ISO 10964, Unseated:

Bonding Identical Substrate	N. m	lb.in.
M10 steel nuts and bolts	0.2	1.8
M10 Zinc dichromate nuts and bolts	0.6	5.3

**Adhesive Properties - Shear Strength**

After 30 minutes @ 22 °C

Compressive Shear Strength, ISO 10123:

	N/mm <sup>2</sup>	psi
Steel pins and collars	1.2	174

After 24 hours @ 22 °C

Compressive Shear Strength, ISO 10123:

	N/mm <sup>2</sup>	psi
Steel pins and collars	1.6	232

**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.
3. 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

1. 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 &amp; cleanup

1. 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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