

PRODUCT DESCRIPTION

MXLOC® 14518 is designed for the sealing of gaskets. 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. It seals close fitting joints between flanges and fixed metal faces and will flex with minor movement from the flange.

Technology	Acrylic
Chemical Type	Methacrylate ester
Appearance (uncured)	Red gel
Fluorescence	Positive under UV
Components	One component – requires no mixing
Viscosity	High, thixotropy
Cure	Anaerobic
Cure Benefit	Room temperature cure
Application	Gasketing and sealing

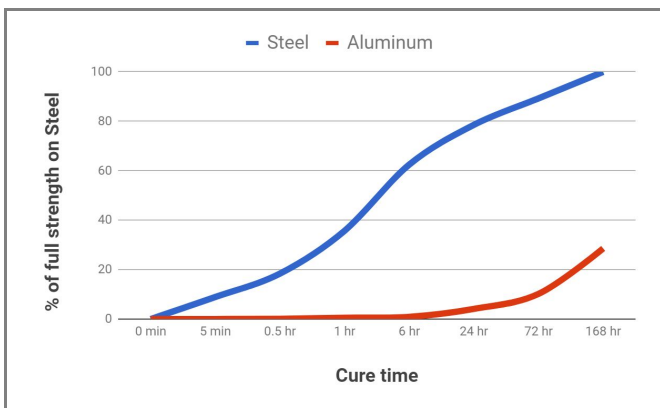
TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.1
Flash Point -	See SDS
Viscosity, Brookfield - HBT, 25 °C, mPa·s (cP)	
Spindle TC, 0.5 rpm	3000,000 to 4500,000
Spindle TC, 5 rpm	500,000 to 1000,000

TYPICAL CURING PERFORMANCE

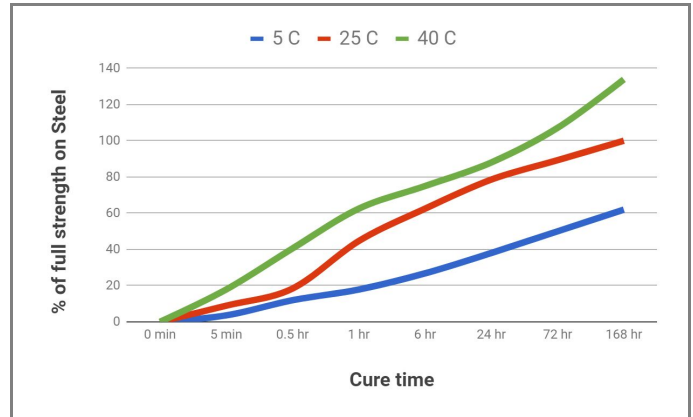
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on grit blasted steel lap shears compared to different materials and tested according to ISO 4587.



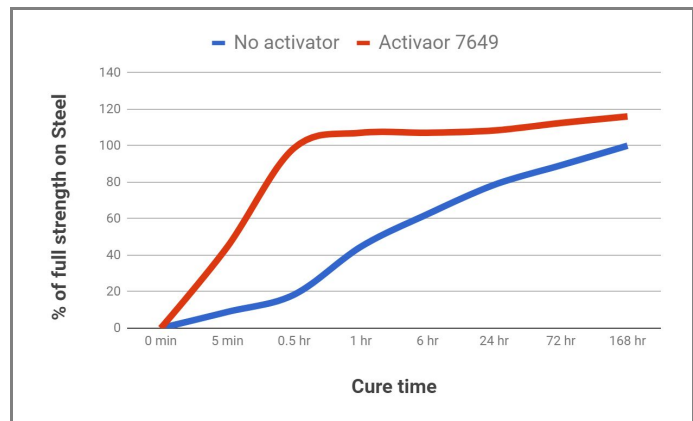
Cure Speed vs. Temperature

The rate of cure will depend on the temperature. The graph below shows the shear strength developed with time at different temperatures on grit blasted steel lap shears and tested according to ISO 4587.



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 shear strength developed with time on grit blasted steel lap shears using Activator 7649™ and tested according to ISO 4587.



TYPICAL PERFORMANCE OF CURED MATERIAL

Operating temperature -54 °C~150 °C

Adhesive Properties

Cured for 24 hrs @ 22 °C, Lap Shear Strength, ISO 4587:

Bonding Identical Substrate	N/mm ²	psi
Steel	4.3	626
Aluminum	0.2	33

Cured for 1 week @ 22 °C, Lap Shear Strength, ISO 4587:

Bonding Identical Substrate	N/mm ²	Psi
Steel	4.4	636
Aluminum	1.6	228

Cured for 30 minutes @ 22 °C, Compressive Shear Strength, ISO 10123:

Bonding Identical Substrate	N/mm ²	Psi
Steel pins and collars	7.0	1,015

Cured for 24 hours @ 22 °C, Compressive Shear Strength, ISO 10123:

Bonding Identical Substrate	N/mm ²	Psi
Steel pins and collars	7.7	1,117

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 manually as a continuous bead or by screen printing to one surface of the flanges.
5. Low pressures (<0.05 MPa, psi) may be used when testing to confirm a complete seal immediately after assembly and before curing.
6. Flanges should be tightened as soon as possible after assembly to avoid shimming.

For disassembly & cleanup

1. Use localized heat (250 °C) to disassemble while hot.
2. Use a wire brush to clean the charred product.

Note

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