PRODUCT DESCRIPTION

MXBON® 12639 is designed for the bonding of cylindrical fitting parts. The product is a green color, high viscous single component acrylic based material. The product could replace traditional bolts or fittings because of its easy assembling process, high efficiency and the quality. It not only uses on active metals but also passive metals surface such as stainless steel. The product cures in the absence of air, the product can be further accelerated by the use of Activator 017649.

Technology	Acrylic
Chemical Type	Dimethacrylate ester
Appearance (uncured)	Green liquid
Fluorescence	Positive under UV light
Components	One component – requires no mixing
Viscosity	High
Cure	Anaerobic
Secondary Cure	Activator
Application	Retaining
Strength	High

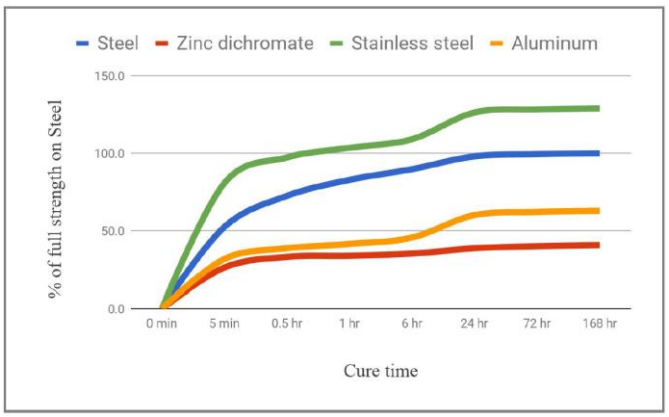
TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.1
Flash Point -	See SDS
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP)	
Spindle 3, 20 rpm	2,000 to 3,000
Shelf life	24 months unopened when stored at 8 to 24℃

TYPICAL CURING PERFORMANCE

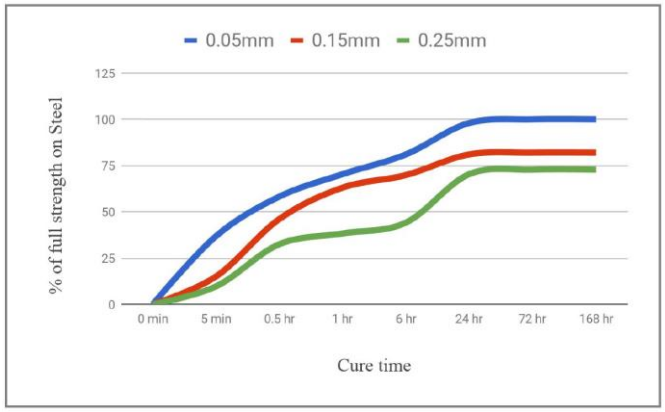
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on steel pins and collars compared to different materials and tested according to ISO 10123.



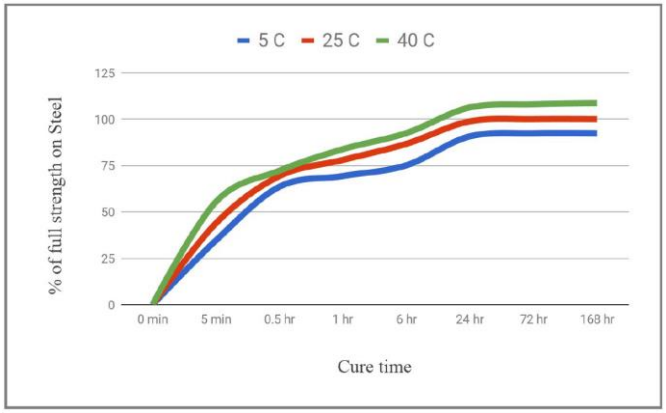
Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. The following graph shows shear strength developed with time on steel pins and collars at different controlled gaps and tested according to ISO 10123.



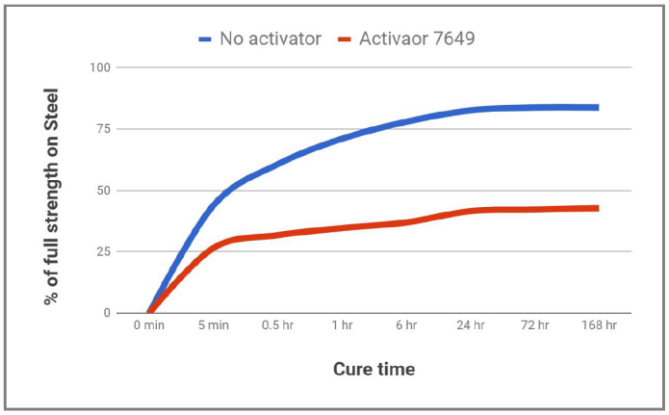
Cure Speed vs. Temperature

The rate of cure will depend on the temperature. The graph below shows the shear strength developed with time at different temperatures on steel pins and collars and tested according to ISO 10123.



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 steel pins and collars using Activator 017649 and tested according to ISO 10123.



TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties - Shear Strength

After 24 hours @ 25 ℃

Compressive Shear Strength, ISO 10123:

	N/mm^2	psi
Steel pins and collars	5 ~ 28	725 ~ 4,060

TYPICAL ENVIRONMENTAL RESISTANCE

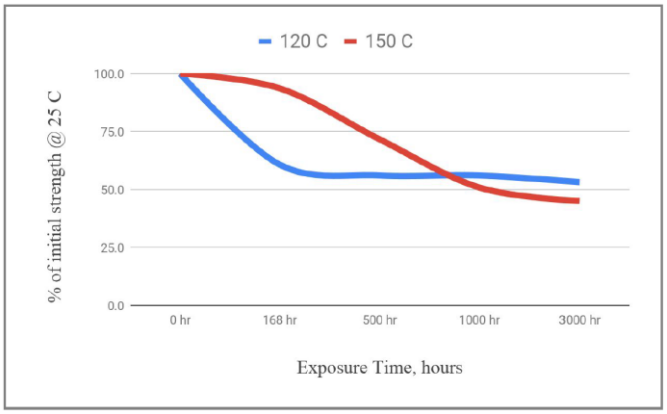
Cured for 1 week @ 25 ℃

Compressive Shear Strength, ISO 10123

Steel pins and collars

Heat Aging

Aged at temperature indicated and tested @25 ℃



Chemical/Solvent Resistance

Aged under conditions indicated and tested @25 ℃

		% of initial strength				
Environment	**℃**	168 hrs	500 hrs	1000 hrs	3000 hrs	5000 hrs
Unleaded Petrol	25	100	100	95	90	85
Water/ethylene glycol 50/50	87	105	105	100	95	90
IPA	25	95	90	80	80	75
Acetone	25	100	100	95	90	85

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 ℃ to 24 ℃. For details, consult the Safety Data Sheet, (SDS). Shelf life is two years 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 & cleanup

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

Note

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