

Product Description

BYLLOC 302 is designed for the sealing and locking of threaded fasteners. The product is a single component anaerobic, high strength, acrylic based threadlocker. The product cures when confined in the absence of air between close fitting metal surfaces and prevents leakage and loosening from vibration and shock.

BYLLOC 302 offers the following characteristics:

Technology	Acrylic
Appearance (uncured)	Green liquid
Chemical Form	Dimethacrylate ester
Fluorescence	Positive under UV
Cure	Anaerobic
Secondary cure	Activator
Components	Single – requires no mixing
Viscosity	Low
Strength	High
Application	Threadlocking

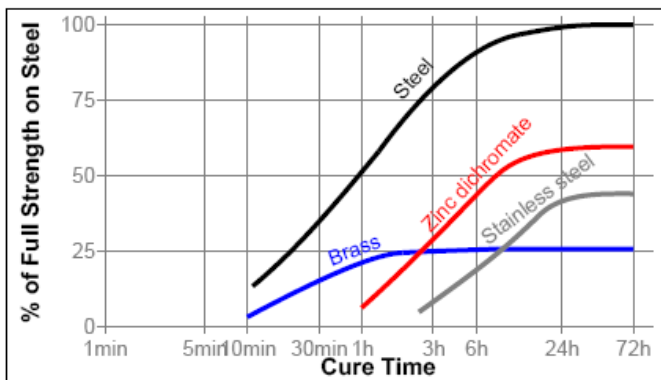
BYLLOC 302 is particularly suitable for uses including heavy duty applications, such as nuts onto studs in pump housings and studs into motor housings. Used also on other fasteners where maximum strength is required.

Properties of Uncured Material

	Typical Value
Specific Gravity @ 25°C	1.1
Viscosity @ 25°C	400-600 cPs
Flash Point	See MSDS
Fixture Time	15 mins

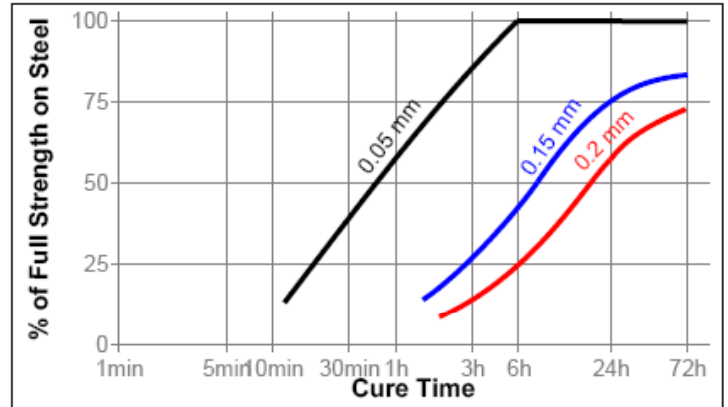
Cure speed vs. substrate

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



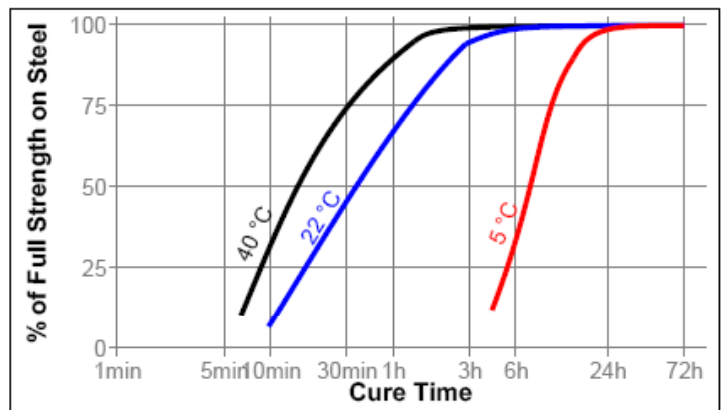
Cure speed vs. bond gap

The rate of cure will depend on the bond gap. Threaded fasteners gap size is depend on thread type and quality. The graph below shows shear strength developed with time on steel collars and pins at 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 below shows the breakaway strength developed with time at different temperatures on M10 steel bolts and nuts and tested according to ISO 10964.



Cure speed vs. activator

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

Typical performance of cured material

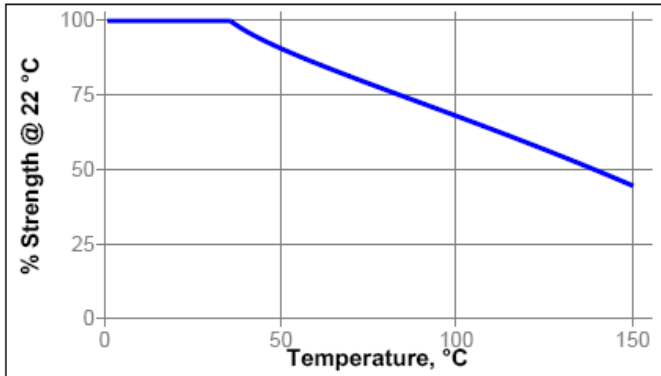
	Typical Value
Operating temp °C	-54°C - 150°C
(After 24 hr at 20-25°C) on M10 steel nuts & bolts)	

	Typical Value
Breakaway Torque M10 steel bolts & nuts ISO 10964	26Nm
Prevail Torque M10 steel bolts & nuts ISO 10964	36Nm

Typical heat resistance

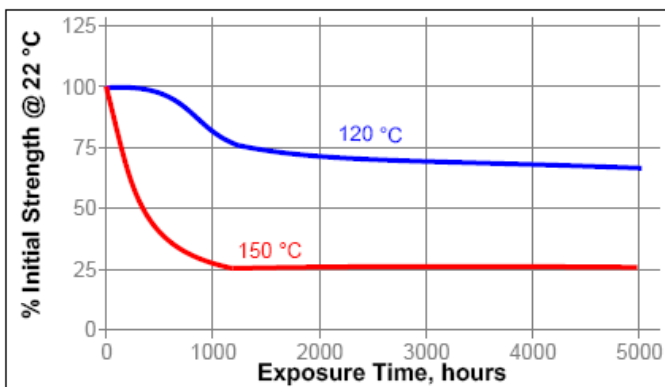
Hot Strength

Tested at temperature



Heat aging

Aged at temperature indicated and tested at 22°C



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. This product is not recommended for use on certain plastics.

Directions for use

1. For optimum performance surfaces should be clean and free of grease.
2. If the material is an inactive metal consider using activator.
3. Shake the product thoroughly before use.
4. Apply several drops to the bolt & nut.
5. Assemble and tighten as required.
6. To prevent the clogging of the nozzle, do not let the tip touch metal surface during application.

For disassembly

1. Use localized heat to bolt or nut, disassemble while hot.

For cleanup

To remove cured product use a combination of solvent and abrasion such as a wire brush. .

Precaution

1. Use proper ventilation, avoid contact with skin and eyes.
2. If contact with skin occurs, rinse with warm water or dissolve gradually with appropriate debonder.
3. Do not try to remove forcibly.
4. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
5. Keep well out of reach of children.

Storage

Keep adhesive in a cool, dry place optimal storage 8°C-21°C, is recommended unless otherwise labelled. To prevent contamination of unused material, do not return any product to its original container.

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