

Cylinlock[®] 846

Product Description

Heron[®] Cylinlock[®] 846 is a fast curing, high strength anaerobic adhesive yielding higher shear strengths with temperature resistance up to 300°F (149°C). It provides relatively quick cures, outstanding solvent resistance, and improved reliability for metal service applications.

Typical Applications

- Keys in worn keyways
- Bushings
- Pins, wheels, gears, pulleys

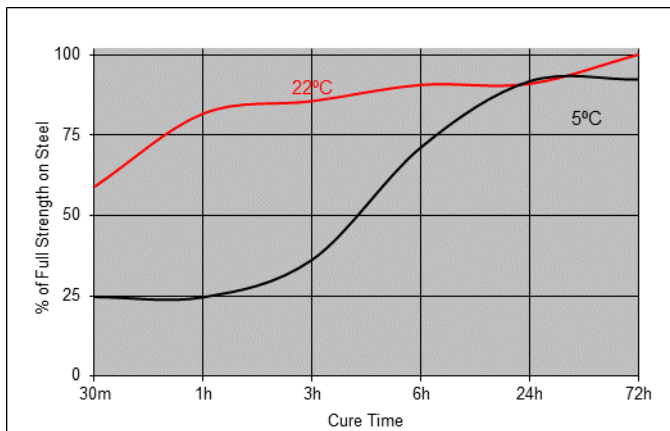
Typical Properties (Uncured)

Property	Value
Chemical Type	Methacrylate Ester
Appearance	Green fluorescent liquid
Specific Gravity	1.10
Fluorescence	Positive
Viscosity @ 25°C, cP	1000 - 1500
Flash Point	See SDS

Typical Curing Performance

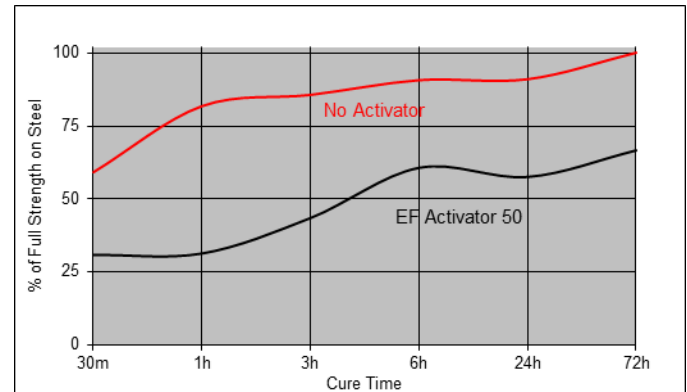
Cure Speed vs. Temperature

The rate of cure will depend on the ambient temperature. The graph shows the shear strength developed with time at different temperatures on steel pins and collars and tested according to ASTM D4562.



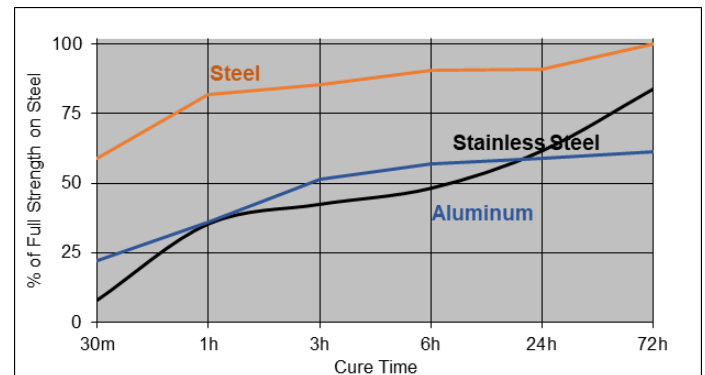
Cure Speed vs. Primer

The graph below shows shear strength developed with time using **Primer 50** on steel pins and collars and tested according to ASTM D4562.



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.



Typical Properties (Cured)

Property	Value
Temperature Range	up to 300°F
Fixture time, Using Steel Nuts/Bolts	Less than 1 hour

Typical Cured Performance

Cured and tested at 22°C.
According to ASTM D5363.

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Substrate	Torque	N•m (in-lb)
3/8 x 16 steel - grade 5 bolts and type 2 nuts	Breakaway	16.9-56.5 (150-500)
	Prevailing	16.9-39.5 (150-350)

Cured and tested at 22°C.
According to ISO 10964.

Substrate	Torque	N•m (in-lb)
M10 black oxide bolts and steel nuts	Breakaway	28.2-45.2 (250-400)
	Prevailing	39.5-50.8 (350-450)
M10 Zinc phosphate nuts and bolts	Breakaway	22.6-28.2 (200-250)
	Prevailing	11.3-22.6 (100-200)

Compressive Shear Strength
Tested at RT, on steel pins and collars according to ASTM D4562.

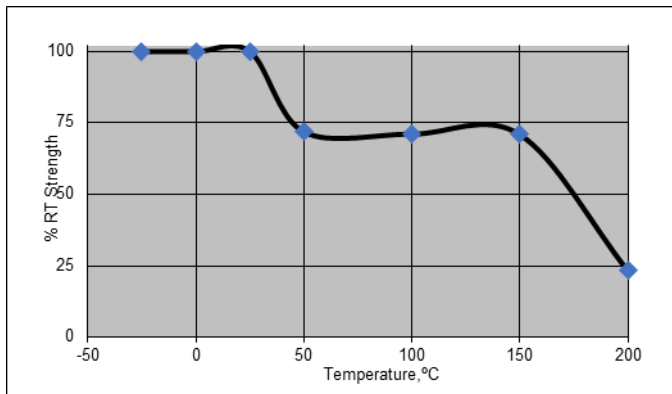
Cure Conditions	Shear Strength, N/mm ² (psi)
24 Hours, RT	≥ 17.2 (≥ 2500)
1 Hour, 93 °C	≥ 17.2 (≥ 2500)
72 hours, RT	≥ 20.7 (≥ 3000)
168 hours, RT	≥ 24.1 (≥ 3500)

Typical Environmental Resistance

Cured for 1 week @ 22°C
Shear Strength, ASTM D4562
Steel Pins and Collars

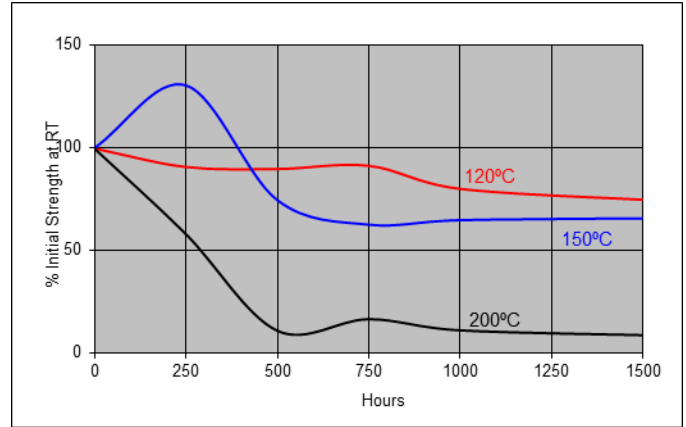
Hot Strength

Tested at temperature



Heat Aging

Aged at temperature indicated - Tested at (22°C).



Chemical/Solvent Resistance

Aged under conditions indicated - Tested at 72°F (22°C)

Chemical/Solvent	Temperature	% of Initial Strength
	(°C)	1500 h
Water Glycol 50/50	87	40.2
Brake fluid	22	77.3
Gasoline	22	45.1
Motor Oil	125	64.9

General Information

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

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some case, these aqueous washes can affect the cue and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). It is recommended to confirm compatibility of the product with such substrates.

Directions For Use

For best results, clean all surfaces (external and internal) with a **Hernon®** cleaning solvent and allow to dry. If the material is an inactive metal or the cure speed is too slow, apply **Activator 49 or 50** and allow to dry.

For Threaded Assemblies the adhesive should be applied to 2-5 threads and the nut screwed on over the

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adhesive. Allow sufficient time to cure (approx.1 hr). Wipe off excess sealant after nut is applied.

For Slip Fitted Assemblies, apply adhesive around the leading edge of the pin and the inside of the collar and use a rotating motion during assembly to ensure good coverage.

For Press Fitted Assemblies, apply adhesive thoroughly to both bond surfaces and assemble at high press on rates.

For Shrink Fitted Assemblies the adhesive should be coated onto the pin, the collar should then be heated to create sufficient clearance for free assembly.

Parts should not be disturbed until sufficient handling strength is achieved.

Disassembly and Cleanup

To aid in disassembly anaerobic compounds can be weakened by heating to at least 500°F (260°C). Once disassembled, cured adhesive can be removed with a solvent.

Storage

Cylinlock® 846 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON MANUFACTURING®, INC. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith. Hernon's Quality Management System for the design and manufacture of high performance adhesives and sealants is registered to the ISO 9001 Quality Standard.