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# Technical Data Sheet Cylinlock® 34323

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## **Product Description**

Hernon® Cylinlock® 34323 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	1.09	
Viscosity @ 25°C, cP	1700 - 2300	
Flash Point	See MSDS	

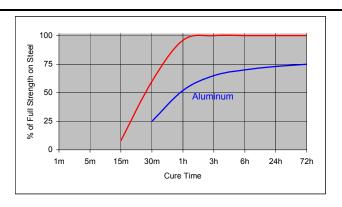
## **Typical Properties (Cured)**

Property	Value
Coefficient of thermal expansion, ASTM D696, K <sup>-1</sup>	80 × 10 <sup>-6</sup>
Coefficient of thermal conductivity, ASTM C177, W / m°K	0.1
Temperature Range	10 to 300°F

## **Typical Curing Performance**

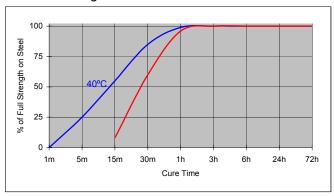
#### Cure Speed vs. Substrate

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



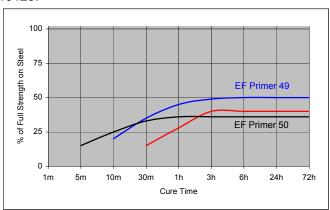
#### Cure Speed vs. Temperature

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 ISO 10123.



## **Cure Speed vs. Primer**

When cure speed is unacceptably long (because of substrate, temperature or gap), performance may be improved by treating the surface with Hernon<sup>®</sup> EF<sup>®</sup> Primer 49 or 50. The graph below shows shear strength developed with time using EF<sup>®</sup> Primer 49 and 50 on steel pins and collars and tested according to ISO 10123.



## **Typical Cured Performance**

Shear Strength, ISO 10123 Steel Pins and Collars

Cure Time	Shear Strength, N/mm² (psi	
24 hours at 22°C	≥ 19.3 (2500)	

## **Typical Environmental Resistance**

#### **Chemical/Solvent Resistance**

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

	Temp	% of Initial Strength	
Chemical/Solvent	(°C)	100 h	500 h
Water Glycol 50/50	87	100	90
Brake fluid	22	80	75
Ethanol	22	95	95
Gasoline	22	100	100
Motor Oil	125	100	100
Acetone	22	80	80

## **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 Material Safety Data Sheet (MSDS).

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 cases 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**<sup>®</sup> cleaning solvent and allow to dry. If the material is an inactive metal or the cure speed is to slow, apply **EF**<sup>®</sup> **Activator 49 or 50** and allow to dry.

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 **Hernon**® **Gasket Remover 30**.

#### Storage

Cylinlock® 34323 should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 82°F (8°C to 28°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**<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**<sup>®</sup> **Sales** for additional information.

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