

TECHNICAL DATA SHEET

High Temperature Sleeve Retainer-Green



Cyclo Industries, Inc

C-64050

401 Maplewood Dr • Jupiter, FL 33458 • 561-775-9600

PRODUCT DESCRIPTION

Cyclo® High Temperature Sleeve Retainer-Green is a one component, solventless, fast curing, anaerobic adhesive/sealant. It is a green colored liquid resin that hardens and cures in the absence of air. Cyclo® High Temperature Sleeve Retainer self-hardens into a tough plastic material when it is confined between close-fitting metal parts. The cured adhesive is a thermoset plastic suitable for exposure to most solvents and engine fluids.

PRODUCT BENEFITS

- No mixing
- No curing outside of joint
- No on-torque adjustments needed
- Restores fit to worn assemblies
- Prevents fretting and corrosion
- Allows the use of slip fit or press fit
- For use on assemblies with gaps up to 0.007" diametral

TYPICAL APPLICATIONS

- Retains keys and splines
- Retains bearings in place, preventing spin out
- Retains rotor to shafts in fractional hp motors
- Retains bushings and sleeves in housings and on shafts
- Augments press fits

DIRECTIONS FOR USE

1. Remove any grease or oil by using a compliant Cyclo® Brake & Parts Cleaner.
2. For slip fitted assemblies, apply adhesive around the leading edge of the collar and use a rotating motion during assembly.
3. For press fits, adhesive should be applied thoroughly to both bond surfaces and assembled at high press-on rates.
4. 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.
5. For faster cure rates, use Cyclo® C-930 Surface Preparation on both surfaces.
6. Parts should not be disturbed until sufficient handling strength is achieved.
7. Any material that is on the outside of the assembly will not cure. Wipe off with a dry cloth.

PROPERTIES OF UNCURED MATERIAL

	Typical Value
Appearance	Green liquid
Specific Gravity @ 77°F	1.12
Viscosity, cps	500 - 700

Flash Point, COC, °F	>200°
Cure Speed Fixture -	1 hour
Full cure -	24 hours

For Cleanup

1. Residual liquid films outside the joints are readily soluble in Cyclo® Brake & Parts Cleaner.
2. Cured product can be removed with a combination of soaking in Cyclo® Gasket Remover and mechanical abrasion such as a wire brush.

For Disassembly

1. Apply localized heat to assembly to approximately 232°C(450°F). Disassemble while hot.

For Reassembly

1. Remove any loose product from the assembly.
2. Apply primer to mating parts.
3. Assemble as per directions.

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PERFORMANCE OF CURED MATERIAL

	Value
Temperature Resistance -	-65°F to 400°F(-54°C to +204°C)
Corrosivity -	None (Slightly acidic, may discolor some metals.)
Shear Strength -	>3000PSI
Elongation	<2%

TYPICAL CURING PERFORMANCE

Cure speed vs. substrate

The rate of cure will depend on the material used. Cyclo® High Temperature Sleeve Retainer-Green will react faster and stronger with **Active Metals**. However, **Inactive Metals** will require the use of an activator (Cyclo® C-930 Surface Preparation) to obtain maximum strength and cure speed at room temperature.

Active Metals	Inactive Metals
Soft Steel Iron	Bright Platings
Copper	Anodized Surfaces
Brass	Titanium
Manganese	Zinc
Bronze	Pure Aluminum
Nickel	Stainless Steel

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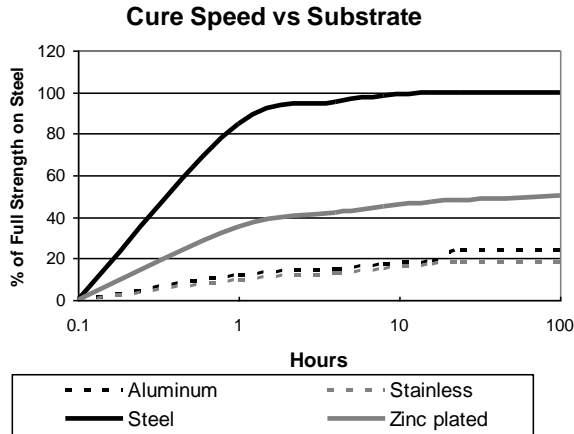
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Aluminum Alloy Cadmium

The graph below shows the breakaway strength developed with time on 3/8" - 16 Grade 5 bolts and Grade 8 nuts compared to different materials.



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).

ORDERING INFORMATION

Part Number
C-64050

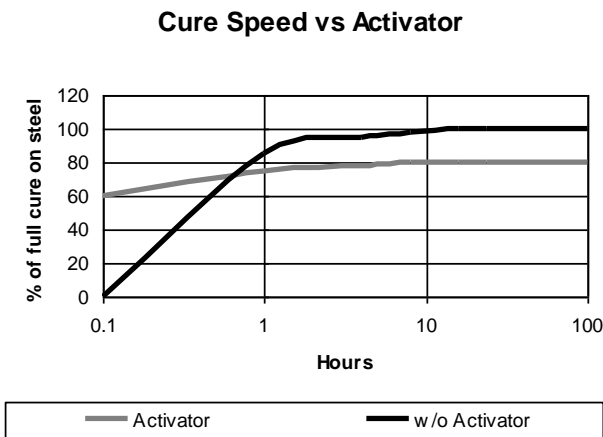
Container Size
50 ml bottle

STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container.

Cure speed vs. activator

Where cure speed is unacceptably long, or large gaps are present, applying an activator (Cyclo® C-930 Surface Preparation) to the surface will improve cure speed. A 3/8-16 steel nut and bolt assembly will fixture in about 5 minutes using an activator, while fixturing will occur in about 20 minutes without an activator. Full cure in 24 hours for both procedures. The graph below shows the breakaway strength developed with time using Cyclo® C-930 Surface Preparation.



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