HERNON®
High Performance Adhesives and Sealants
ISO 9001 Registered

121 Tech Drive
Sanford, FL 32771
(407) 322-4000
Fax: (407) 321-9700
www.hernon.com

Technical Data Sheet
Gasket Replacer 910

Product Description

Hernon® Gasket Replacer 910 is a single component room temperature cure gel-like anaerobic gasketing compound formulated to provide instant sealing capabilities. Once cured between mating metal flanges and filling voids in the surface, **Gasket Replacer 910** provides a thin, flexible, solvent and temperature resistant seal.

Typical Applications

- Vacuum pump flanges
- Fuel tanks on chain saws
- Fuel and water pumps
- Gearbox covers
- Automotive and truck axle covers

Product Benefits

- Instant sealing
- Provides reliable seal
- No shrinkage due to solvent evaporation
- Excellent chemical resistance
- Eliminates need for retorquing

Typical Properties (Uncured)

Property		Value
Resin		Methacrylate ester
Appearance		Purple liquid
Viscosity at 25ºC, cP	TB @ 0.5 rpm	700,000 to 1,700,000
	TB @ 5.0 rpm	150,000 to 375,000
Specific gravity		1.10

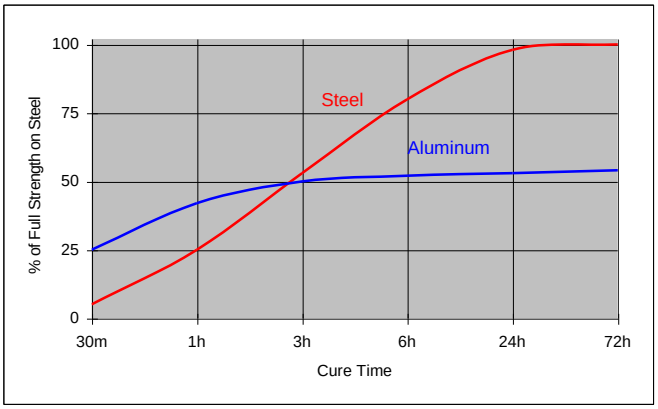
Typical Properties (Cured)

Property	Value
Coefficient of thermal expansion, ASTM D696 (K^{-1})	80 x 10^{-6}
Coefficient of thermal conductivity, ASTM C 177, W/(m·K)	0.1
Temperature Range, ºF	-65 to 300

Typical Curing Performance

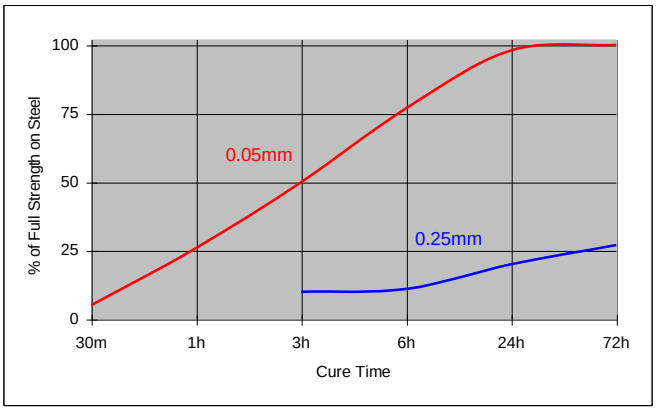
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on grit blasted steel lap shears compared to different materials and tested according to ISO 4587.



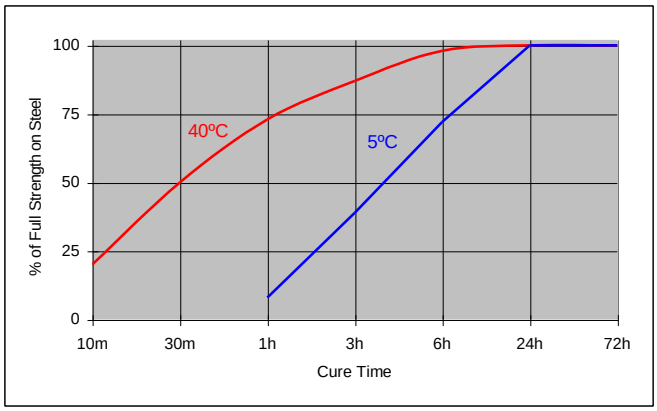
Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. The following graph shows shear strength developed with time on grit blasted steel lap shears at different controlled gaps and tested according to ISO 4587.

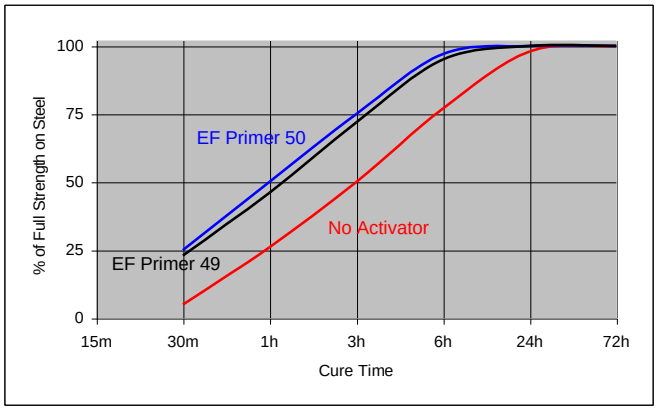


Cure Speed vs. Temperature

The rate of cure will depend on the ambient temperature. The graph below shows the shear strength developed with time on grit blasted steel lap shears at different temperatures and tested according to ISO 4587.



Cure Speed vs. Primer
Where cure speed is unacceptably long, or large gaps are present, applying primer to the surface will improve cure speed. The graph below shows the shear strength developed with time on grit blasted steel lap shears using **Hernon® EF® Primer 49** and **EF® Primer 50** and tested according to ISO 4587.



Typical Cured Performance

Shear strength, ISO 10123, Steel pins and collars

Cure	N/mm² (psi)
1 hour at 22ºC	≥ 5.0 (≥ 725)
24 hours at 22ºC	≥ 6.0 (≥ 870)

Lap-shear strength, ISO 4587, Steel (grit blasted)

Cure	N/mm² (psi)
24 hours at 22ºC	≥ 6.0 (870)
24 hours at 90ºC, tested at 22ºC	≥ 6.9 (≥ 1000)

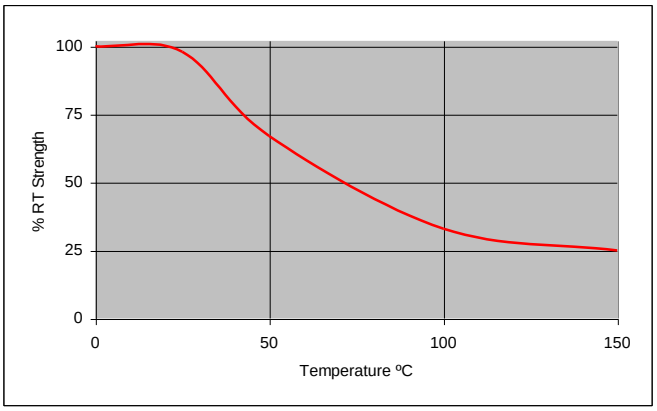
Tensile strength, ISO 6922, Steel (grit blasted)

Cure	N/mm² (psi)
24 hours at 22ºC	≥ 14.0 (2030)

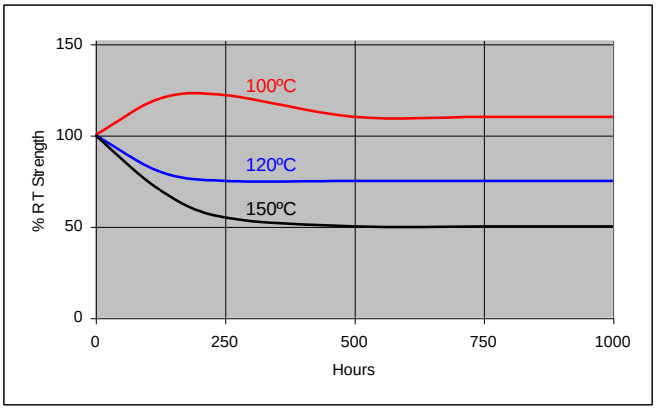
Typical Environmental Resistance

Cured for 1 week @ 22ºC
Lap-shear strength, ISO 4587
Steel (grit blasted)

Hot Strength
Tested at temperature



Heat Aging
Aged at temperature indicated and tested at 22°C



Chemical/Solvent Resistance
Aged under conditions indicated and tested at 22ºC.

Chemical/Solvent	Temp (ºC)	% of Initial Strength	
		500 h	1000 h
Motor oil	125	160	165
Gasoline	22	20	15
Water Glycol 50/50	87	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 case these aqueous washes can affect the cure 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). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use

1. For best performance bond surfaces should be clean and free from grease.
2. The product is designed for close fitting flanged parts with gaps up to 0.25 mm.
3. Apply manually as a continuous bead or by screen-printing to one surface of the flanges.
4. Low pressures (<0.05 MPa) may be used when testing to confirm a complete seal immediately after assembly and before curing.
5. Flanges should be tightened as soon as possible after assembly to avoid shimming.

Storage

Gasket Replacer 910 should be stored in a cool, dry location in unopened containers at a temperature between 45ºF to 85ºF (7ºC to 29ºC) 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.