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HERNON.com

EST. 1978

### TECHNICAL DATA SHEET

ISO-9001

# Gasket Replacer 906

### **Product Description**

Hernon<sup>®</sup> Gasket Replacer 906 is a single component room temperature cure gel-like anaerobic gasketing compound formulated to provide instant sealing capabilities. Once cured between mating metal flanges filling voids in the surface, Gasket Replacer 906 provides a thin, flexible, solvent and temperature resistant seal. Gasket Replacer 906 can replace or be used as a dressing for conventional gaskets.

### **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	
Chemical Type		Methacrylate ester	
Appearance		Red gel	
Viscosity at	TC @ 0.5 rpm	2,800,000 to 5,000,000	
25⁰C, cP	TC @ 5.0 rpm	400,000 to 800,000	
Specific gravity		1.12	
Operating Temp Range		-65F to 300F (-53C to 149C)	
Flash point		See SDS	

#### Instant Seal

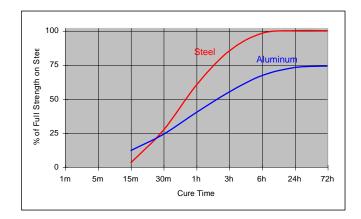
Anaerobic sealants have the ability to resist low on-line test pressures while uncured. This test was performed with uncured product immediately after assembly of an annular polycarbonate sealing surface with an internal diameter of 50 mm and an external diameter of 70 mm.

Induced Gap, mm	Pressure Resistance, MPa		
0.000	0.30		
0.125	0.15		
0.250	0.05		

### **Typical Curing Performance**

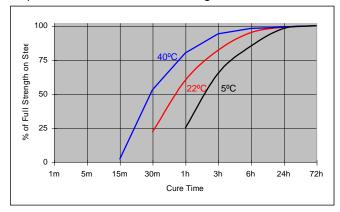
#### Cure Speed vs. Substrate

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 ASTM D1002.



#### 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 ASTM D1002.



# **Typical Properties (Cured)**

Property		Value	
Coefficient of therma ASTM D696 (K <sup>-1</sup> )	al expansion,	80 x 10 <sup>-6</sup>	
Coefficient of thermal conductivity, ASTM C 177, W/(m·K)		0.1	
Specific Heat, kJ/(kg·K)		0.3	
Maximum Sealing Pressure		5,000 psi ?????	
Gap Filing Ability -	No Primer W / Primer	0.010 in. (0.254 mm) 0.050 in. (1.35 mm)	
Percent Elongation (to 250°F)		30%	

# **Typical Cured Performance**

### Cured 24 hours at 22°C

Test Method	Test Specimens	N/mm² (psi)	
Shear Strength, ASTM D1002	Grit blasted steel Lap-shears	≥500	
Compressive Shear Strength, ASTM D905	Steel pins and collars	≥5.0 (≥725)	
Tensile Strength, ASTM D897	Grit blasted steel pins	≥8.5 (≥1200)	

Cured and tested at 22°C on 3/8 x 16 grade 5 bolts and type 2 nuts according to ASTM D5363.

Cure	Substrate	Torque	N∙m (in-lb)	
24 hours	Steel	Breakaway	≥ 5.6 (≥50)	
		Prevailing	≥ 5.6 (≥50)	

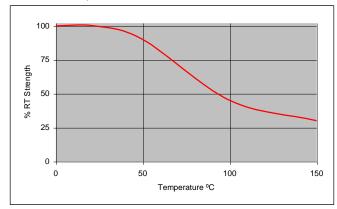
# **Typical Environmental Resistance**

The following tests refer to the effect of environment on strength. This is not a measure of sealing performance.

Cured for 1 week @ 22 °C. Shear Strength, ASTM D1002, grit blasted steel

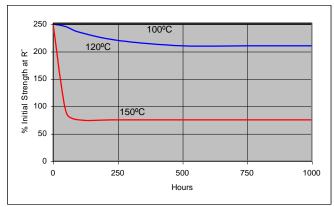
### **Hot Strength**

Tested at temperature



### **Heat Aging**

Aged at temperature indicated and tested @ 22°C



### **Chemical/Solvent Resistance**

Aged under condition indicated - Tested at 22ºC.

	Temp	% of Initial Strength		
Chemical/Solvent	(ºC)	100 h	500 h	1000 h
Water Glycol 50/50	87	100	100	90
Gasoline	22	60	60	55
Motor Oil	125	100	160	140

# **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**

To obtain the best results, clean the parts from contamination such as grease, dirt, and heavy oil.

Hernon<sup>®</sup> Cleaner 62 or a similar chlorinated solvent can be used to clean parts.

- 1. Screen Printing complex flange surfaces and shapes can be coated in seconds using specially designed screens. Screen printing gives the best results for precise control of sealant, quantity, and thickness.
- 2. **Hand** material can easily be applied to the flange surfaces from a tube or a caulking cartridge. A break in the bead easily can be repaired. Small parts can be coated adequately by pressing them into a saturated polyester urethane sponge or by roll coating.
- 3. **Tracking** material can be traced accurately and precisely by using a Hernon Dispensing Machine.

#### Storage

**Hernon**<sup>®</sup> **Gasket Replacer 906** should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 85°F (8°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.

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.