HERNON®
Formulating Solutions

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Dripstop® 946

Product Description

Hernon® Dripstop® 946 is a high-performance adhesive/sealant specifically formulated for the sealing and mild locking of hydraulic and pneumatic threaded parts used with hydraulic and pneumatic equipment. **Dripstop® 946** will seal pipe threads, standard nuts and bolts, fittings for hydraulic and pneumatic systems, air conditioners, fittings for refrigeration equipment, and all types of water and chemical processing valves and equipment, including steam up to 300ºF.

Dripstop® 946 is a single component, thixotropic (non-migrating) anaerobic adhesive/sealant, that does not contain PTFE, and will provide a rapid cure at room temperature. Upon cure, **Dripstop® 946** becomes a highly crosslinked thermoset plastic preventing leakage from shock, vibration as well as corrosive liquids and atmospheres.

Product Benefits

- Effectively seals a wide range of industrial fluids and gases.
- Does not shrink or crack due to solvent evaporation. 100% solid system)
- Ready to use, single component.
- Room temperature cure.

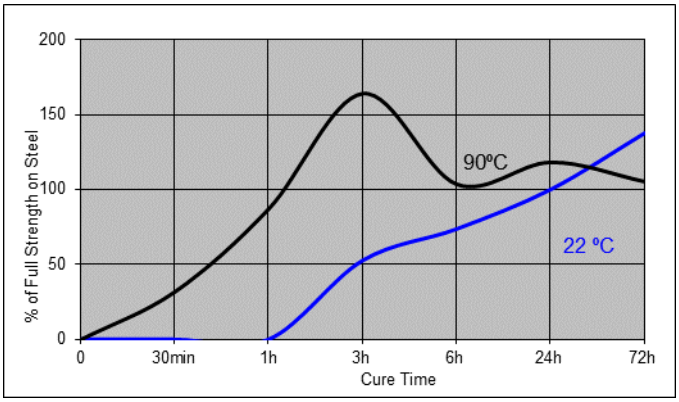
Typical Properties (Uncured)

Property	Value
Resin	Dimethacrylate ester
Appearance	Brown liquid
Viscosity @ 25ºC, cP	350-700
Specific gravity	1.06
Flash Point	See SDS

Temperature Range for cured material: -55 to 150 ºC (-65 to 300 ºF)
It can seal up to 10,000 psi on ¼" NPT threads.

Typical Curing Performance

Cure Speed vs Temperature
The graph below shows breakaway strength developed with time on 3/8inch NPT steel pipe tees and plugs and tested according to ASTM D6396.



Typical Cured Performance

Cured for 24 hours at 22ºC.

Substrate	Strength, (in-lb)	
3/8inch NPT steel pipe tees and plugs, ASTM D6396	Breakaway torque:	120-180
3/8 x 24 Grade 2 Steel Nuts and Bolts, ISO 10964	Breakaway torque:	90 - 140
	Prevailing torque:	50 - 100
3/8 x 16 Grade 2 Steel Nuts and Grade 5 Bolts	Breakaway torque:	70-180
	Prevailing torque:	50-115

Cured for 72 hours at 22ºC.

Substrate	Strength, (in-lb)	
3/8inch NPT steel pipe tees and plugs, ASTM D6396	Breakaway torque:	150-220

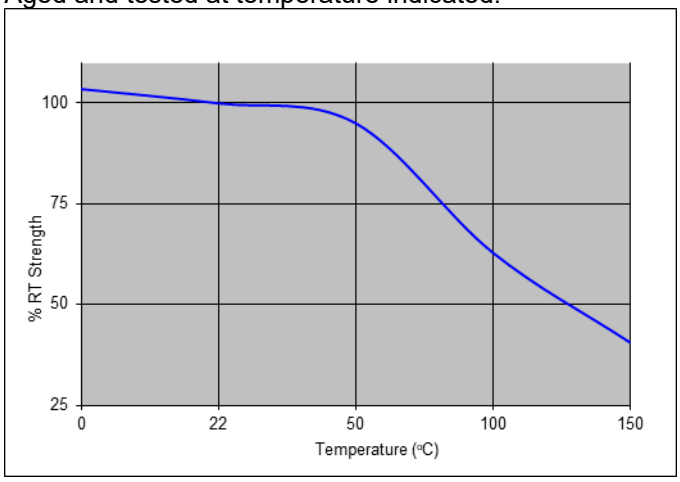
Compressive Shear Strength
Tested on steel pins and collars according to ASTM D4562.

Cure Conditions	N/mm² (psi)
24 Hours, RT	≥ 5.5 (≥ 800)

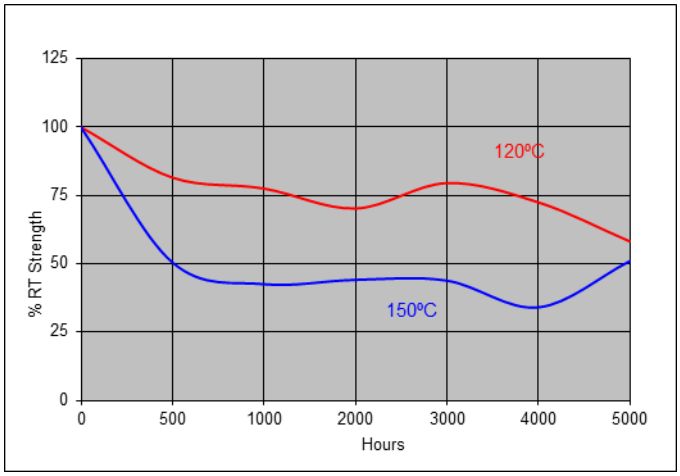
Typical Environmental Resistance

Cured for 1 week @ 22ºC
Breakloose Torque, ISO 10964, pre-torqued to 5 N•m
M10 zinc phosphate steel nuts and bolts

Hot Strength
Aged and tested at temperature indicated.



Heat Aging
Aged at temperature indicated - Tested at 22ºC.



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

Chemical /Solvent	Temperature (ºC)	% of Initial Strength	
		500h	1000h
Water/Glycol 50:50	87	87.3	97.3
Brake Fluid	22	100.6	86.0
Acetone	22	78.3	59.2
Ethanol	22	117.2	75.8
Motor oil	125	69.4	68.2
Gasoline	22	65.6	50.3

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
Assembly

- 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, spray all threads with **Hernon® Primer 49 or 50** and allow to dry.
- Apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads to thoroughly fill the voids. For bigger threads and voids, adjust product amount accordingly and apply a 360° bead of product on the female threads also.
- Using accepted trade practices, assemble and wrench tighten fittings until proper alignment is obtained.
- Properly tightened fittings will seal instantly to moderate pressures. For maximum pressure resistance and solvent resistance allow the product to cure a minimum of 24 hours.

Disassembly and Cleanup

- Remove with standard hand tools.
- In rare instances where hand tools do not work because of excessive engagement length, apply localized heat to nut or bolt to approximately 250 °C. Disassemble while hot.
- Once disassembled, cured adhesive can be removed with Hernon® Gasket Remover 30.

Storage

Dripstop® 946 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.