HERNON®
High Performance Adhesives and Sealants
ISO 9001 Registered

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Technical Data Sheet
Dripstop® 923

Product Description

Hernon® Dripstop® 923 is a single component, paste-like anaerobic pipe sealant compound. The product cures when confined in the absence of air between close fitting metal surfaces. This industrial grade sealant develops controlled low strength to facilitate disassembly.

Product Certification

Certified to NSF/ANSI Standard 61 for use in commercial and residential potable water systems not exceeding 82ºC (180ºF).

Typical Applications

Dripstop® 923 is recommended for sealing metal tapered pipe threads and fittings up to 2 inches (5cm) NPT for industrial applications in the chemical processing, petroleum refining, pulp/paper, waste treatment, textile, utilities/power generation, marine, automotive, industrial equipment, gas compression and distribution industries. It is also recommended for industrial plant fluid power systems.

Typical Properties (Uncured)

Property	Value
Resin	Methacrylate ester
Appearance	White paste
Viscosity @ 25ºC, cP	200,000 to 400,000
Specific gravity	1.16
Flash point	See MSDS

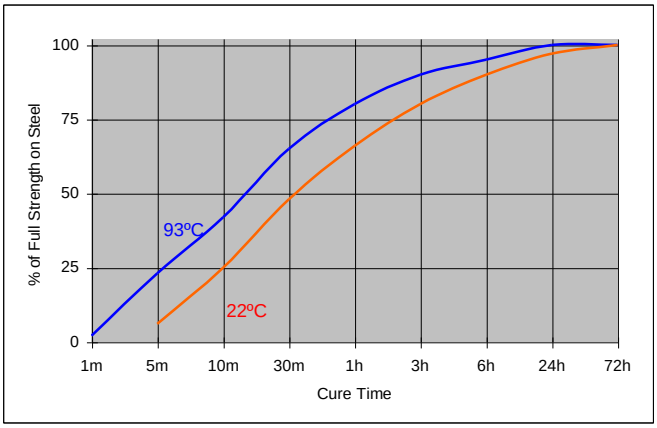
Typical Properties (Cured)

Property	Value
Coefficient of thermal expansion, ASTM D696, K^{-1}	80×10^{-6}
Coefficient of thermal conductivity, ASTM C177, W / mºK	0.1
Specific Heat, kJ/(kg·K)	0.3
Pressure Resistance, psi	10,000
Temperature Range, ºC (ºF)	-55 to 150 (-65 to 300)

Typical Curing Performance

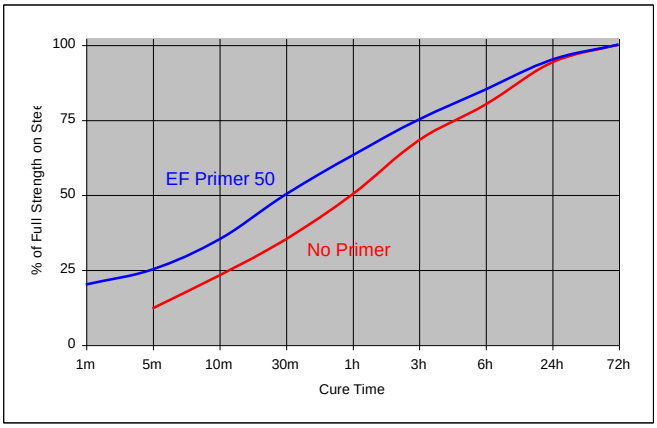
Cure Speed vs. Temperature

The rate of cure will depend on the ambient temperature. The graph shows the breakaway strength developed with time at different temperatures on 3/8 inch NPT steel pipe tees and plugs and tested according to ASTM D6396.



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 primer**.** The graph below shows breakaway strength developed with time using **EF® Primer 50** on 3/8 inch NPT steel pipe tees and plugs and tested according to ASTM D6396.



Typical Cured Performance

Breakaway Torque, ASTM D6396
3/8 inch NPT steel pipe tees and plugs

Cure Condition	N•m (In-lb)
72 hours at 22ºC	5 (45)

Breakaway Torque, ISO 10964
3/8 x 24 steel nuts (grade 2) and bolts (grade 2)

Cure Condition	N•m (In-lb)
24 hours at 22ºC	≥ 2.8 (25)
24 hours at 93ºC	≥ 2.3 (20)

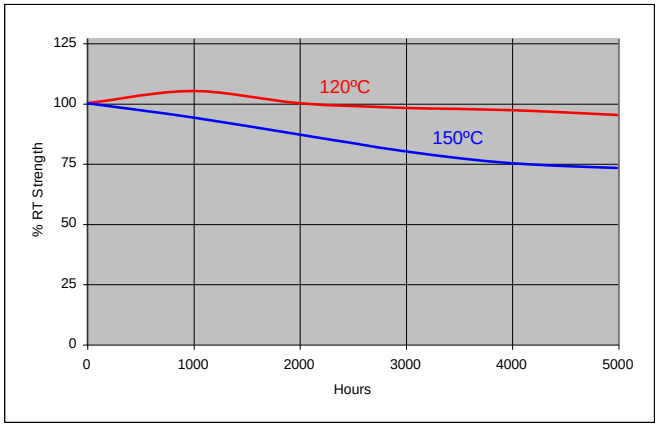
Shear Strength, ISO 10123
Steel pins and collars

Cure Condition	N/mm² (psi)
24 hours at 93ºC	≥ 1 (145)

Typical Environmental Resistance

Cured for 72 hours @ 22ºC
Breakloose Torque, ISO 10964, pretorqued to 1.1 N•m
M10 steel nuts and bolts

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



Chemical/Solvent Resistance
Aged 720 hours at conditions indicated, tested at 22ºC.

Chemical/Solvent	ºC	% of Initial Strength
Motor oil	87	100
Unleaded Gasoline	87	100
Phosphate Ester	87	100
Isopropanol	87	100
Air	87	100
Distilled Water	87	100
Automatic Transmission Fluid	87	100
Brake Fluid	87	92

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
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® EF® 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® 923 should be stored in a cool, dry location in unopened containers at a temperature between 46ºF to 82ºF (8ºC to 28ºC) 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.