

ISO 9001 Registered

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# Technical Data Sheet Dripstop<sup>®</sup> 944

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# **Product Description**

**Hernon**<sup>®</sup> **Dripstop**<sup>®</sup> **944** is designed for the locking and sealing of metal tapered threads and fittings. The product cures when confined in the absence of air between close fitting metal surfaces and prevents loosening and leakage from shock and vibration.

# **Product Benefits**

- Single component (no mixing)
- Predictable and reliable performance
- Reduces inventory
- No shrinkage or cracking due to solvent evaporation

# **Typical Applications**

- Replaces the fastener locking device of all kinds
- Sealing and locking tapered threads

#### Performance Testing

Each batch of **Dripstop**<sup>®</sup> **944** is tested to the lot requirements of MIL-S-22473E (Grade HVV), and to the detail requirements of ASTM D5363 (AN0163).

# **Typical Properties (Uncured)**

Property	Value
Chemical Type	Dimethacrylate Ester
Appearance	Brown Liquid
Viscosity @ 25°C, cP	1500 to 2500
Specific Gravity	1.18
Flash Point	See MSDS
Fluorescence	Positive Under UV

# **Typical Properties (Cured)**

Property	Value
Coefficient of thermal expansion, ASTM D696, K <sup>-1</sup>	0.1
Coefficient of thermal conductivity, ASTM C 177, W/(m·K)	0.1
Specific Heat, kJ/(kg·K)	0.3
Temperature Range, °C (°F)	-55 to 150 (-65 to 300)

# **Typical Performance Properties**

Prevailing Torque Strength, ISO 10964 3/8 x 24 Grade 2 Steel Nuts and Bolts

Cure Time at 22°C	N∙m (in-lb)
6 Hours	≥ 0.57 (≥5)
24 Hours	1.1 to 2.8 (10-25)

# Typical Environmental Resistance

Cured 72 hours at 22°C Breakaway Torque, ISO 10964 3/8 x 24 Grade 2 Steel Nuts and Bolts

# Hot Strength

Tested at temperature



#### **Heat Aging**

Aged at temperature and tested at room temperature.



#### Chemical/Solvent Resistance

Aged under conditions indicated for 720 hours and tested at 22°C.

Chemical/Solvent	Temp (°C)	% of Initial Strength
Air Reference	87	100
Motor Oil	87	100
Unleaded Gasoline	87	100
Phjosphate Ester	87	100
Isopropyl Alcohol	87	100
Distilled Water	87	100
Acetone	87	100

#### **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 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. Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

# Directions for use

#### For Assembly

- 1. For best results, clean all surfaces (external and internal) with **Hernon**<sup>®</sup> **Cleaning Solvent 62** and allow to dry.
- If the material is an inactive metal or the cure speed is too slow, spray all threads with EF<sup>®</sup> Primer 49 or 50 and allow to dry.
- 3 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.

- 4. Using accepted trade practices, assemble and wrench tighten fittings until proper alignment is obtained.
- 5. 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.

#### For Disassembly

- 1. 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.
- 3. Once disassembled, cured adhesive can be removed with **Hernon<sup>®</sup> Gasket Remover 30** by following instructions. A solvent wipe with an organic or petroleum solvent will remove uncured adhesive outside the joint.

#### For Cleanup

1. Cured product can be removed with a combination of soaking in **Hernon**<sup>®</sup> **Cleaning Solvent 62** and mechanical abrasion such as a wire brush.

#### Storage

**Dripstop**<sup>®</sup> **944** should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 82°F (8°C to 28°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.

#### **Dispensing Equipment**

**Hernon**<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**<sup>®</sup> **Sales** for additional information.

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