

Technical Data Sheet EF[®] Primer 50

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Product Description

Hernon[®] Environmental Friendly[®] (EF[®]) Primer 50 is a single component, non-CFC solvent based product designed to promote the cure speed of Hernon[®] anaerobic adhesives and sealants.

Typical Applications

EF[®] Primer 50 is used where increased cure speed of Hernon[®] anaerobic adhesives and sealants is required. It is especially recommended for applications with passive metals or inert surfaces and with large bond gaps. It is particularly recommended for cure conditions below 15°C.

Performance Testing

EF[®] Primer 50 meets the requirements of ASTM D5363 (Grade N).

Typical Properties

Property	Value
Chemical Type	Organic accelerator
Appearance	Green liquid
Specific Gravity @ 25°C	0.8
Viscosity @ 25°C, cP	2
Drying Time Steel @ 20°C	20 to 30 secs
On Part Life, days	30
Flash Point	See MSDS

Effect on Cured Properties of Adhesives

Shear Strength, ISO 4587

Cured for 24 hours at 22°C

Shear Strength, lap-shear specimens, ISO 4587

Substrates treated with EF[®] Primer 50

Substrate	Shear Strength (psi)	
	Prod 716	Prod 722
G/B Steel	>1500	>1500
Aluminum	>1000	>1000

Torque Strength with 3/8 x 24 nuts and bolts

Substrate	Torque Strength (in-lb)
	Prod 232
Prevail, 24 hr cure	>= 40

Handling Precautions

This is a highly flammable material. When dispensing this material from a pressurized system, only nitrogen or argon should be used. Please check local, state and federal regulations regarding the use of flammable liquids in the workplace. For example, special care must be taken to avoid contact of the activator or its vapor with open flame or any electrical equipment that is not flame proofed.

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.

Directions For Use

1. Spray or brush the primer on one or both mating surfaces. For small gaps, treatment of only one surface may be adequate. Contaminated surfaces may need repeated treatment or special degreasing prior to activation to remove any dissolvable contamination. If bonding surfaces are porous, or if gaps are large, apply the primer to both surfaces.

Note: Because the solvent base can affect certain plastics or coatings, checking all surfaces for compatibility is recommended.

2. Allow the solvent sufficient time to evaporate under good ventilation.
3. After priming, parts should be bonded within 2 days. Try to prevent any surface contamination before the bonding process.
4. Apply the adhesive/sealant to one or both surfaces and assemble parts immediately.

Note: If EF[®] Primer 50 is to be applied to only one surface, apply the adhesive to the opposite surface.

5. When possible, for a few seconds move surfaces in relation to each other to properly distribute the adhesive and to achieve maximum activation. Secure the assembly, and wait for surfaces to fixture before any further handling.

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected with a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Under no circumstances should primer and adhesive be mixed directly as liquids.

Storage

EF® Primer 50 is classified as **HIGHLY FLAMMABLE** and must be stored in an appropriate manner in compliance with relevant regulations. Do not store near oxidizing agents or combustible materials. Store product in the unopened container in a dry location. Store 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® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

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 9001:2008 Quality Standard.