HERNON®
High Performance Adhesives and Sealants
ISO 9001 Registered

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Technical Data Sheet
Primer 50C

Product Description

Hernon® Primer 50C is a concentrate diluted with Acetone to make **Hernon® Primer 50**. Mixing instructions are as follows:

Total Amount	50C	Acetone
1 fluid ounce	0.25 gram	29.3 grams
1 gallon	28.0 grams	2959.0 grams
5 gallons	119.5 grams	14814.0 grams

1. Use a clean, dry container for mixing.
2. Purge container with nitrogen gas before filling to remove any moisture.
3. Weigh out amount listed and mix ingredients for a minimum of 30 minutes or until all concentrate is dissolved.

When mixed, **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

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 15ºC.

Typical Properties when mixed with Acetone

Property	Value
Appearance	Green liquid
Chemical Type	Amine/ Copper salt
Solvent	Acetone
Specific Gravity @ 25ºC	0.79
Drying Time, seconds	20 to 30
On Part Life, days	30
Flash Point	See SDS

Shear Strength
Tested on lap-shear specimens with 1 side primed with **Primer 50** and tested according to ASTM D1002.

Adhesive	Substrate	Cure Time (hours)	Shear Strength (psi)
HASA 716	G/B Steel	24	1000-2000
HASA 722	G/B Steel	24	1500-2500

Torque Strength, ASTM D5363
3/8 x 24 Grade 2 Steel Nuts and Bolts primed with **Primer 50,**
Cure Time at 22ºC with **Nuts N' Bolts® 232**

Prevailing Torque N•m (in-lb)	
Plated	
6 Hours	≥ 2.3 (20)
24 Hours	4.5 to 11.3 (40-100)

Handling Precautions

Once Primer 50 Concentrate is mixed with Acetone the material is **flammable.** 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 naked 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 case, these aqueous washes can affect the cue 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 30 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 **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 Safety Data Sheet (SDS).

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

Storage

Primer 50 Concentrate when mixed with Acetone 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 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.