

Technical Data Sheet Cup/Core Plug Sealant 928

August 2012

Page 1 of 2

Product Description

Hernon[®] Cup/Core Plug Sealant 928 is a thixotropic anaerobic sealant designed for sealing core plugs but applicable to many other high strength applications where non-migration is desired.

Typical Applications

Sealing and securing cylindrical metal assemblies:

- Engine block cup and core plugs
- Water pump seals
- Hub and shaft assemblies

Typical Properties (Uncured)

Property	Value
Chemical type	Dimethacrylate ester
Appearance	Red fluorescent liquid
Viscosity at Spindle 3 at 2.5 rpm 25°C, cP Spindle 3 at 20 rpm	6,000 to 12,000 1,500 to 3,500
Specific gravity	1.08
Flash point	See MSDS

Typical Curing Performance

Fixture Time

Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Fixture Time Pin and Collars	30 - 35 minutes
------------------------------	-----------------

Typical Cured Performance

Shear strength on steel pins and collars, tested in accordance with ISO 10123

Cure at 22°C	Shear Strength, N/mm ² (psi)
1 Hour	6.9 (1000)
24 Hours	≥10.0 (≥1450)
72 Hours	16.9 (2450)

Cured and tested at 22°C on 3/8 x 16 grade 2 nuts and grade 5 bolts according to ISO 10964.

24 Hrs.	Steel	Breakaway	≥22.6 (≥200)
		Prevailing	≥11.3 (≥100)

Torque strength on 3/8 x 16 steel nuts and bolts, tested in accordance with ISO 10964

Cure at 22°C	Torque	Torque Strength, N•m (in-lb)
6 Hours	Breakaway Prevailing	11.3 to 27.1 (100 to 240) 8.5 to 25.4 (75 to 225)
24 Hours	Breakaway Prevailing	14.1 to 28.3 (125 to 250) 11.3 to 29.9 (100 to 265)

Typical Environmental Resistance

Cured for 72 hours @ 23°C
Shear strength, ISO 10123
Steel pins and collars

Hot Strength and Heat Aging

Test	Shear Strength, N/mm ² (psi)
Hot strength at 88°C tested at Temperature	≥13.8 (≥2000)
Heat aging, 120 hours at 121°C, tested at 22°C	≥13.8 (≥2000)

Solvent/Chemical Resistance

Aged under conditions indicated and tested at 23°C

Solvent	Temp (°F)	% of Initial Strength			
		1 wk	2 wks	4 wks	8 wks
Gasoline	73	119	124	99	129
50 / 50 Glycol / H ₂ O	270	121	96	96	86
ATF	300	229	224	202	210
Motor Oil	300	209	195	210	197

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.

Directions for use

1. For best performance bond surfaces should be clean and free from grease.
2. Apply **Cup/Core Plug Sealant 928** to both parts to assure sufficient coverage.
3. Parts must be closely-fitted metal surfaces in order to assure effective sealing and bonding of the assembly.
4. Assemble parts in accordance with standard practice.
5. **Cup/Core Plug Sealant 928** cures in 2 hours on activated parts. Allow 24 hours on unactivated parts.

Storage

Cup/Core Plug Sealant 928 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® 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.