

Technical Data Sheet Self Sealer 618

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Product Description

Hernon® Self Sealer 618 is a high viscosity, tough, pre-applied, non-hardening threaded sealant. When dried, it becomes a resilient, tight clinging, non-curing sealant for tapered or straight threads. It provides an instant seal on different pipe threads and can be used up to eight (8) times without recoating.

Self Sealer 618 is water based, non-toxic, safe and can be applied easily without special handling precautions. It provides resistance to vibrational loosening because of its prevailing torque characteristics. Therefore, it is very effective on non-locking applications.

Product Certification

UL Classification

Classified by Underwriters Laboratories Inc.® MH14222 as to fire hazard only. Self Sealer 618. Classified 0 to 10 less hazardous than paraffin oil in respect to fire hazard. For use in devices handling gasoline, petroleum oils, natural gas (pressure not over 100 psig), butane and propane, not exceeding 2 in. pipe size. Suitable for single assembly ("insertion") use when applied and dried prior to assembly in accordance with the manufacturer's instructions.

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

Product Features

- No cure time is required. The pre-applied film provides instant sealing for NPT threads up to 4 inches in diameter immediately upon installation
- Mechanically, the dry film generates prevailing torque characteristics making threaded parts resistant to vibrational loosening after installation.
- Corrosion is inhibited between mating threads. The threads are safely sealed from contact with the atmosphere by the coating.
- Safe to use with plastics. It will not craze or attack plastic components.

Product Benefits

- The pre-applied coating eliminates liquid and paste migration problems and concerns during installation.
- Precoated fittings can be stored for immediate delivery and assembly.
- The pre-applied coating is tough, resilient and resists shredding and peeling during assembly.
- Ideal for field assembly – precoated parts are always there and ready for the task.
- Precoated parts have a shelf life of several years.

Typical Applications

- Plumbing Parts
- Pipe Fittings
- Shower Heads
- Broken Fittings
- Brake Fittings
- Valves
- Door Closure Hardware
- Compressor Pipe Plugs
- Bearing Adjuster Nuts
- Overhead Fire Sprinklers
- Pressure Gauges

Typical Properties

Property	Value
Chemical Type	Acrylic
Appearance	Burnt orange
Viscosity @ 25°C, cP	4,000 – 6,000
Instant Seal ½ inch NPT fittings	to 830 kPa (120 psi)
Operating Temperature	-55 to 150°C (-65 to 300°F)
On Part Life	4 years
Specific gravity	1.23
Flash point	Aqueous
Solid/Non-volatile content %	43.1 – 52.7

Typical Performance

Torque

3/8" -16 nuts and bolts

Property	N _{em} (in-lb)
Seating Torque	47 (≥416)
Breakloose Torque	19.2 (≥170)
Prevailing Torque	2.26 (≥20)

Pressure Resistance

Pipe Size	Test Pressure	Result
½ in. NPT	10,000 Psi	No Leakage
3 in. NPT	3,000 Psi	No Leakage

Chemical / Solvent Resistance

Test performed on ½ inch NPT tees and malleable plugs. Tested at 4,150 kPa (600 psi) air after 30 days immersion in solvents indicated.

Solvent	°C (°F)	Result
10W30 Motor Oil	120 (248)	No Leakage
Water/Glycol 50/50	100 (212)	No Leakage
Diesel Fuel	50 (122)	No Leakage
Dexron VI (ATF)	120 (248)	No Leakage
Hydraulic Steering Fluid	120 (248)	No Leakage

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).

Directions For Use

Application

Self Sealer 618 can be applied from the bottle directly to pipe threads or from semi-automatic or automatic applicators. The parts to be coated have to be clean, dry and free from any surface contamination. The quantity to be applied on the threads depends on the surface area of the parts to be coated. The table below shows approximate amounts of Self Sealer 618 required for various plug sizes. Properly coated parts should merely be moistened with a thin film of Self Sealer 618.

Usage Chart for Self Sealer 618

Pipe Size, in.	Coating Width, in.	ml/1000 Parts
1/16	5/16	30
1/8	3/8	50
1/4	7/16	112
3/8	1/2	155
1/2	9/16	285
3/4	5/8	400
1	3/4	725
1 1/4	13/16	980
1 1/2	7/8	1150
2	1 1/16	1525

2 1/2	1 1/8	3225
3	1 3/16	4000

Drying Requirements (Thin Film)

- Five (5) to twenty-five (25) minutes @ 150°F with the air flow not less than 500cf/m.
- One half (1/2) to two (2) hours @ 75°F with the air flow not less than 500 cf/m.
- Two (2) to four (4) hours @ 75°F

Storage

Self Sealer 618 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°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 Quality Standard.