

EST. 1978 TECHNICAL DATA SHEET ISO-9001

External Ammunition Sealant 76081

Product Description

Hernon® External Ammunition Sealant 76081 is a single component U.V. anaerobic sealant. 76081 has a low viscosity penetrating material capable of bonding and sealing primers and case mouths in ammunition. This Sealant is specially formulated for Ammunition that needs greater fit tolerance and higher bullet pull forces. Curing occurs when the adhesive is applied between mating surfaces. The cured adhesive is a thermoset plastic and endures exposure to most solvents.

Ammunition Sealant 76081 cures quickly at room temperature without the need for surface activators or heat to seal primer and case mouth assemblies. Fixturing strength develops in two to three minutes. Full strength will be reached in 24 hours. Cure fillets at UV light irradiances above 100 milliwatts/cm² to insure proper cure.

Product Benefits

- UV fluorescence for in-process inspection
- 100% solid system (no solvents)
- · Excellent environmental resistance
- · Good gap filling properties
- Excellent Bullet Pull strengths with low Standard deviation
- UV and anaerobic curing mechanism suitable for metal parts
- Good capillary performance

Typical Properties (Uncured)

Property	Value
Appearance	Clear- Lt yellow liquid
Fluorescent	Yes
Specific Gravity	1.0498
Viscosity @ 25°C, cP	8 - 15
Flash Point	See SDS
Anaerobic fixture time, brass	≤ 3 minutes
UV tack free time, secs	≤ 3
Surface Tension, mN/m	32.80

Typical Cured Performance

Property	Value
Full Strength, hours	24
Temperature range, ⁰F	-65 to 250

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 Safety Data Sheet (SDS).

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 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). It is recommended to confirm compatibility of the product with such substrates.

Comparison Chart

Hernon offers several grades of ammunition sealants from no strength providing sealing and protection from environmental conditions to high strength bonding of bullet tip to cartridge to assist in ballistic requirements.

Low Strength series include External Ammunition Sealant 76020/76021/76040/76041.

Medium Strength series include External Ammunition Sealant 76060/76061.

High Strength series include External Ammunition Sealant 76081/76084.

Directions for Use

Shake well before use.

Ammunition Sealant 76081 should be applied in sufficient quantity to fill the rim around Primer cavities.

Application of Adhesive for Bullet Sealing1.

 External Ammunition Sealant 76081 can be applied to the case mouth interface, primer and penetrates the interface within 5 seconds. Hernon® offers Sureshot® non-contact dispensing valves for dispensing External Ammunition Sealants.

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- 2. External Ammunition Sealants can be cured within 5 seconds using Hernon's powerful Ultracure® UV LED curing lights.
- A low-powered UV lamp/light can be used to inspect for presence of the sealant.

Disassembly and Cleanup

Non-cured sealant can be removed with **Hernon**® **Cleaner 62**.

Storage

Ammunition Sealant 76081 should be stored in a cool, dry location away from light 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 fully and semi-automated precision dispensers with inspection stations for bullet sealing and seal verification. **Hernon**® high-speed dispensers can seal over 1200 bullets per minute. 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.

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