Bullet Tip ID Coating

Product Description

Hernon's Bullet Tip ID Coating is the latest technology in ammunition identification, specifically formulated for using inkjet applications, offering advances in adhesion, scratch resistance, and superior print quality. This single-component, solvent-free, UV or LED-curable coating ensures fast curing time and cost-efficient processing, combining with Hernon patented dispensing technologies, making it the ideal solution for high-volume ammunition marking with simple operation. Typical applications include;

- Ammunition identification and branding
- Military and commercial bullet marking
- High-speed production environments requiring rapid curing

Traditional paints (solvent-based or water-based) are being replaced by modern UV LED curable acrylates. Now the drying time is just a few seconds under UV LED light. Full cure will be reached in 24 hours.

Product Benefits

- Excellent adhesion to bullet tips
- Scratch-resistant for durability
- High-definition print quality and uniformity
- Solvent-free, environmentally friendly formulation
- Single-component system for easy application
- UV or LED cured for instant drying and rapid processing

Available in multiple colors that matched to the Federal Standard 595C- or RAL for easy identification

Technical Specifications:

- Viscosity: Optimized for smooth application
- Curing Mechanism: UV or LED light
- Curing Time: Instant upon UV exposure
- Adhesion: Strong bond to metal surfaces
- Durability: Resistant to abrasion and environmental factors

Typical Properties (Uncured)

Property	Value
Appearance	Clear liquid*
Specific Gravity	1.06
Viscosity 25ºC, cPs	5 - 40
Flash Point	See SDS
UV tack free time, seconds	≤ 3
Surface Tension, mN/m	≤ 25
UV/LED energy needed (J/cm^2)*	≤ 5

Available in multiple colors, Viscosity Range might slightly change according to color.
**Tested with EIT LED cure L365/40W Radiometer

Typical Cured Performance

Property	Value
Full Strength, hours	24
Temperature range, ºC	-20 to 65

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems.

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

Directions For Use

Mix well before use.

Application for Bullet Tip ID Coating (Bullet Sealing):

UV Protective glasses and gloves should be worn for protection against the UV and LED light

Application Process:

1. Ensure bullet tip surfaces are clean and dry.
2. Bullet Tip ID Primer can be used to ensure better adhesion before the application of coating.
3. Apply Bullet Tip ID coating using an appropriate Inkjet printer.
4. Control the thickness between 12- 15 microns.
5. Expose to UV LED light for rapid curing. Hernon's powerful Ultracure® UV LED curing lights can be used for curing.
6. Ensure all the coated areas to be exposed under the UV LED light in a simultaneous matter.
7. The time for exposure depends on the UV LED light's irradiance. For using Hernon UV 9 at ¼ inch (6 mm) distance, the exposure time is about 3 - 5 seconds. If only use UV LED light from one side, rotating the parts may require longer exposure time as only part of the object is under the UV LED light during exposure.
8. Adhesion and surface properties will increase 30 minutes after cure, and it will be further strengthened in the first 24 hours.
9. Verify adhesion and print quality before packaging.

Storage

Bullet Tip ID Coating should be stored in a cool, dry location away from light in unopened containers at a temperature between 45ºF to 85ºF (7ºC to 29ºC) unless otherwise labeled. To prevent contamination of unused material do not return any material to its original container.
Pigments in liquid coatings will separate over time and a mixing step is required before use of product.

- For the first use of product, roll bottle for a minimum of 8 hours at 20-60RPM
    - For continuous use after first mixing, no further mixing is required
- If the bottle is sitting within a week or after the weekend, roll it again for 1 hour.

Dispensing Equipment

Hernon® offers a complete line of 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.