

## APPLICATION GUIDE CERAKOTE H- SERIES TWO-COMPONENT CERAMIC FIREARM COATINGS

**CERAKOTE™** • A division of NIC Industries, Inc. 7050 Sixth Street, White City, OR 97503 Phone: 541-826-1922 / Fax: 541-826-6372 / www.nicindustries.com

## Preparation of substrate is crucial for maximum adhesion and performance of this material.

- 1) Completely disassemble the item to be coated. If pins or parts are left in, they can produce runs and ruin the finish. Due to the thin finish produced by Cerakote $^{TM}$ , everything *except* the inside of the barrel can be coated.
- 2) Remove all coatings, oils, and contaminants from substrate with either a de-greasing chemical and/or by heating substrate to temperatures high enough to remove coatings or contaminants. Do not exceed 150°C (300°F).
- 3) A blasted profile must be applied to the substrate to remove any rust, scale, or other coatings. This is also required to ensure maximum adhesion. Remove any sharp edges that may create thin areas or protrude through the coating. For best results use a dry grit material such as aluminum oxide or garnet equivalent to a 100 120 mesh size. Glass beads are not recommended as they are not aggressive enough to produce a sufficient blast profile. Profile plastic and wood parts lightly (~40 psi).
- 4) Place metal parts in an oven at 125°C (250°F) for approximately 30 minutes to evaporate any last minute moisture, oils, or contaminants that blasting or contact with skin may have deposited on surface. Only Cerakote<sup>TM</sup> approved solvents may be applied to the substrate after completing the blast profile.
- 5) Hang parts to allow for best view and application access. This can be done by using support wires or hooks. Make sure to place parts in such a way that they will not bump into each other. **Do not touch parts with bare skin.** Alligator clips or 24 to 30-gauge wire (0.5 0.26mm) are recommended for small parts such as screws and springs.
- (6) Shake the bottle labeled "Part A" until all solids are completely dispersed. Mix 18:1, 18 parts of component "A" with 1 part of component "B" by volume. For example, fill a graduated cylinder with 36 ml of "A" and then add 2 ml of "B" for a 38 ml sample. Make sure that the "H" Series products are completely mixed together and the ratios are correct. Failure to completely disperse the product will result in poor chemical ratios and product failure. Pot life after component "A" and "B" are mixed is

- 2 hours in an open container, 6 hours in a closed container. Due to the limited pot life, do not mix more than you intend to use.
- 7) Blow off substrate with a high-pressure air nozzle to remove any blasting dust left on the surface. Wear safety goggles or face shield for your protection. Work in a well-ventilated area. If ventilation is not available, wear a respirator –see MSDS for additional information.
- 8) Recommended spray equipment is a siphon-fed detail gun with a fine to medium tip (0.5 to 0.8mm). The use of a small spray tip pattern will aid in coating hard to reach areas without excessive build up in surrounding areas. Material does not need to be thinned. Use as received.
- 9) A single application of product is recommended for a final film thickness of 0.5 to 1.0 mil (12 25 microns). Work from the most difficult surface out to the easiest. This will aid in reducing runs or excessive build up.
- 10) Allow to air-dry for 5-10 minutes (coating is still wet to the touch at this point do not touch or bump parts). For optimal cure, place the coated pieces in a 125°C (250°F) oven and cure for 2 hours. For a quick cure, 1 hour at 150°C (300°F) is sufficient. If the substrate material is heat-sensitive (such as plastic or wood) then a 94°C (200°F) cure for 2 hours is adequate.
- 11) After cure cycle is complete, finished goods may be shipped once they have cooled to the touch.
- 12) Discard the unused product from the spray gun when finished do not pour any product mixed with "Part B" back into any remaining "Part A." This will render the remaining product unusable.
- 13) Clean tools and equipment with acetone or Cerakote  $^{\text{TM}}$  cleaning solvent.

Please contact a Cerakote™ technician with questions on proper use and/or application. Onsite or offsite training courses are available for further instruction. Consult your MSDS for proper handling, disposal, and precautions while using this product.

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The information contained in this bulletin we believe to be correct to the best of our knowledge and testing. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that you make adequate tests in your laboratory or plant to determine if this product meets all your requirements.

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