



APPLICATION GUIDE

C-186 PISTON COAT AMBIENT CURE CERAMIC DRY FILM

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

1. Degrease parts to remove any oils or contaminants from the substrate with either a degreasing chemical (acetone, brake parts cleaner, tert-Butyl acetate, or Simple Green®) and/or by heating the substrate to temperatures high enough to remove contaminants. From this point on, it is critical to avoid touching the parts with your bare hands. Use powder-free or Nitrile gloves to handle the parts.
2. Plug/mask off any areas that you do not want coated. Improper masking on certain mechanical parts may cause tolerance or functionality issues.
3. A sand blasted profile must be applied to the substrate to remove any rust, scale, or other coatings. This is also required to ensure maximum coating adhesion. For best results, blast at 80 – 100 PSI using a 100-Mesh dry grit material such as aluminum oxide or garnet sand. Glass beads are not recommended as they are not aggressive enough to produce an adequate blast profile.
4. Fixture parts to allow for the 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.
5. We recommend, but do not require that the metal parts are placed in an oven at 300°F (148°C) for approximately 30 minutes. This will evaporate any surface moisture or solvents from degreasing, while also drawing out any possible trapped oils or contaminants. Parts will have to be re-prepped (degrease, gas-out, sandblast) if there are any indications of contaminants.
6. Shake the product (5 – 15 minutes) until the coating is completely mixed and no solids remain in the bottom of the container. Failure to completely disperse the product will result in poor chemical ratios and product failure.
7. Using a 100-Mesh strainer or 149-Micron strainer equivalent, filter the coating into a high quality HVLP/LVLP detail spray gun with a 0.8 mm tip, such as an IWATA LPH-80 (Cerakote Part #SE-138).
8. Blow off the substrate with a high-pressure air nozzle to remove any sand blasting media/dust left on the surface. Work in a well-ventilated area and always wear proper Personal Protective Equipment (PPE) when applying product (i.e. safety goggles and respirator.) See the Safety Data Sheet (SDS) for additional information.
9. For best application results, set spray gun pressure to 30 PSI. Apply 1 to 2 coats of product to achieve a recommended film thickness of 1.0 – 2.0 mils. Work from the most difficult surface out to the easiest. The use of a small spray pattern will aid in coating hard to reach spots without excessive build up in surrounding areas. Refer to the Technical Data Sheet (TDS) for coating composition specifics.
10. Allow coated parts to air-dry; parts will be tack free after approximately 45 to 60 minutes. Until this point the coating is still wet, so take care to not bump or touch the parts. Coating will be partially cured after 24 hours and fully cured 5 days after the application.
11. Finished goods may be shipped following a 24-hour partial cure. **Do not package parts airtight if shipped prior to 5 day full cure.**
12. Clean tools and equipment with acetone or Cerakote cleaning solvent (Cerakote part #SE-274).

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 SDS for proper handling, disposal, cautions while using this product.

NIC Industries, Inc. does not warranty the use or application of the materials it manufactures or supplies. Our only obligation shall be to replace any defective materials supplied by us or refund the original purchase price of that product after we have determined the product to be defective. We assume no liability for damages of any kind and the user accepts the product "as is" and without any warranties, expressed or implied. The suitability of the product and/or intended use shall be solely the responsibility of the user.

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.

INNOVATIONS OF NIC INDUSTRIES, INC.
CERAKOTE | CERAKOTE AUTO AND HOME | PRISMATIC POWDERS
7050 6TH Street, White City, OR 97503
866-774-7628