

APPLICATION GUIDE CERAKOTE V- SERIES HIGH-TEMPERATURE CERAMIC 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) 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.
- 2) A blasted profile must be applied to the substrate to remove any rust, scale, or other coatings. This is required to ensure maximum adhesion. Remove any sharp edges or welding slag that may create thin areas or protrude through 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).
- 3) Place parts in an oven at 260°C (500°F) for approximately 30 minutes to evaporate any last minute moisture, oils, or contaminants that blasting or contact with skin have deposited on surface. Only CerakoteTM approved solvents may be applied to substrate after completing the blast profile.
- 4) Hang parts to allow for best view and application access. This can be done by using support wires and 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 30-gauge wire are recommended for small parts such as screws and springs.
- 5) Make sure the "V" Series products are 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.
- 6) Blow off substrate with a high-pressure air nozzle to remove any blasting dust left on the surface. Wear safety goggles of face shield for your protection. Work in a well-ventilated area. If ventilation is not available, wear a respirator see MSDS for additional information.

- 7) Recommended spray equipment is a siphon-fed detail gun with a fine to medium tip. The use of a small spray tip pattern will aid in coating hard to reach areas without excessive build up in surrounding areas. Electrostatic application may also be an option. Material does not need to be thinned. Use as received.
- 8) Two applications of product are recommended for a 12 to 25 microns (0.5 to 1.0 mil) film thickness. In some cases a single coat will suffice for particular applications. Work from the most difficult surface out to the easiest. This will aid in reducing runs or excessive build up.
- 9) You may re-coat parts prior to pre-bake or cure cycle if needed. **Touch-up cannot be performed after the cure cycle**. If the parts need to be touched up after the cure cycle, the coating will need to be removed down to bare metal with the entire coating process repeated.
- 10) Allow to air-dry for 20 minutes, and then place in an oven at 80° C (175°F) for 20 minutes to allow excess solvents from the coating to out-gas.
- 11) Ramp the oven up to 260°C (500°F minimum) to 370°C (700°F). After desired temperature is reached, cure parts for 60 minutes. For V-Series, higher cure temperatures are recommended for extreme application requirements. If parts are processed below 260°C (500°F), they have **NOT** fully cured. The final cure needs to take place at higher temperatures, which can occur with exhaust heat or the higher temperature cure cycles as mentioned above.
- 12) After cure cycle is complete, finished goods may be shipped once they have cooled to the touch.
- 13) Clean tools and equipment with acetone or CerakoteTM cleaning solvent.

Please contact a CerakoteTM 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.