



APPLICATION GUIDE

DFL-100 Oven Cure Dry Film Lubrication

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

1. Remove all coatings, oils, and contaminants from the substrate with either a degreasing chemical (acetone, brake parts cleaner, Simple Green®) and/or by heating the substrate to temperatures high enough to remove coatings or 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 de-greasing, while also drawing out any possible trapped oils or contamination. Parts will have to be re-prepped (degrease, gas-out, sandblast) if there are any indications of contamination.
6. Shake the product for 5-15 minutes depending on the container size, 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. Utilizing F-100 Catalyst, mix at a 9:1 ratio by weight with the Cerakote Mixing Calculator. Mixing by volume is not recommended.
8. 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).
9. 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 the product (i.e. safety goggles and respirator.) See the Safety Data Sheet (SDS) for additional information.
10. For best application results, set the spray gun pressure to 30 PSI. Apply 3-6 coats of the product to achieve a recommended film thickness of .5-1.0 mils. Work from the most difficult surface 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. Note: In colder climates you may want to wait 30-60 seconds.
11. Allow coated parts to ambiently flash for a minimum of 15 minutes and no longer than 2 hours before placing into the oven for cure. Until this point the coating is still wet.
12. DFL-100 spray guns need to be completely cleaned prior to utilizing the spray gun for another coating to prevent cross contamination.
13. Clean tools and equipment with acetone.
14. Cured parts will have a greasy film on the surface, this is normal and can be removed with acetone if desired.

*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.***

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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.

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