NANO-CERAMIC COATING

APPLICATION INSTRUCTIONS

1. PRODUCT DESCRIPTION

AT 1660 is a FDA compliant food safe non-stick coating suitable for a wide range of cookware. Treated surfaces are exceptionally easy to clean without scrubbing or abrasive tools. AT 1660 also creates a more uniform thermal transfer for better cooking results. AT 1660 is easy to apply and extremely durable. Surfaces may be easily re-coated when required. AT 1660 cures under ambient conditions.

2. SURFACE PREPARATION

Intended surface should be clean and free from oils, dirt and any other previous contaminants.

3. APPLICATION

- As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.
- One or two coats will provide necessary performance for the vast majority of applications.
- Coating may be applied by spray, wipe-on or dip method.

• Wipe-On Method:

- Apply coating with a wetted pad or lint free cloth. Use a back and forth or circular motion to cover the intended surface. Work the coating into the surface so as to fill all pores and scratches.
- Use slight pressure to re-wipe the surface to be sure that there is a wet and glossy film on the surface.
- Desired thickness is a dry film of 2-3 microns. More is not better. Do not wipe the surface dry as this may remove the thin film.
- Allow coating to dry to the touch in ambient conditions.

Dip Method:

- Smoothly dip the component in an appropriately sized container of the coating.
- o Leave immersed for a few seconds.
- Smoothly remove the component and hang or lay out to dry.
- Allow coating to dry to the touch in ambient conditions.

Spray Method:

- Hang all parts to be coated to enable easy spraying of surfaces. It may be necessary to attach a thin wire on small pieces to prevent them from swinging while spray coating the part.
- Use HLVP or similar spray gun fitted with a fine tip (i.e. 0.08). A finer spray mist is better, enabling the
 product to flow out more easily and to help control the final film thickness.
- Spray tip should be positioned approximately 6-8" from the substrate. This is particularly important if the
 application environment is above normal room temperature. Spraying from too far away will result in some
 solvents evaporating prior to contact with the surface and therefore resulting in sub-optimal performance.
- Spray most difficult area first.
- o Target dry film thickness of 2-3 microns. Do not build the coating too thick. **More is not better**.
- o Allow coating to dry to the touch in ambient conditions.

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7. DRYING & CURING TIMES

Solids	12%
Drying Time	Dry to the touch in approximately 15-25 minutes at ambient temperatures. Warmer airflow will accelerate dry time.
Curing Time	Once dry to the touch, there are two options for full curing: Continue to cure at ambient temperature. Full ambient cure properties are obtained after 12-24 hours at room temperature. OR accelerate curing by placing coated substrate in convection type over for 30 minutes at 350°F (176°C). Coating must be dry to the touch prior to elevating the temperature. If AT 1660 is heated too soon the product may become sticky or gummy. In this case, remove coating with MEK or similar solvent. Then re-read the application instructions and repeat the above application steps. Once fully cured, wash with soapy water, rinse and dry prior to putting in service.

8. COVERAGE RATE

 Coverage will be approximately 1,630 square feet per gallon (40 square meters per liter) at dry film thickness of 3 microns.

9. STORAGE STABILITY & SHELF LIFE

The shelf life is one year when stored in the original, unopened container. Store containers in a well-ventilated and covered area away from extreme heat and moisture. Contact your ALPHATEK representative if you have any questions about the products or its uses.

10. SAFETY

Refer to the Safety Data Sheet for this product prior to use.