

# AT 1620 - ALPHATEK NON-STICK

## NANO-CERAMIC COATING

## APPLICATION INSTRUCTIONS

### 1. PRODUCT DESCRIPTION

AT 1620 is a FDA compliant base coat sealer for porous metal cooking surfaces (e.g. grills, wire screens, etc.). AT 1620 is generally used as a primer / sealer. Apply AT 1660 to create a non-stick surface. AT 1620 is easily applied and cures under ambient conditions. It has excellent adhesion and provides long-term performance. AT 1620 is inert (benign) material when cured. Cured coating is free from any harmful fumes.

### 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.
- AT 1620 is normally applied on surface where one coat is all that is necessary to seal the surface.
- Coating may be applied by wipe-on (common) or dip method.
- **Wipe-On Method:**
  - Apply coating with a wetted pad or lint free cloth. Use a back and forth circular motion to cover the intended surface. Work the coating into the surface so as to fill all pores and weld-joints (on wire screens).
  - Use slight pressure to re-wipe the surface to be sure that there is a wet and glossy film on the surface.
- **Dip Method:**
  - Smoothly dip the component in an appropriately sized container filled with the coating.
  - 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.
- Desired thickness is a dry film of 4-6 microns. **More is not better.** Wipe off or remove excess coating prior to drying.
- Apply in a single coat. **Do not try to apply a second coating** as it will not stick to the first coat and will peel-off.
- Allow coating to dry to the touch in ambient conditions.
- Once dry to the touch, there are two options for full curing prior to applying a top coat:
  - Continue to cure at ambient temperature for 24 hours
  - OR accelerate curing by placing coated substrate in convection type oven for 30 minutes at 350°F (176°C). Coating **must** be dry to the touch prior to elevating the temperature. If AT 1620 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.
- Apply Top Coat:
  - Once the cured coated part has cooled to room temperature it may be top coated with a thin (2-3 micron) coating of AT 1660 to create a slick non-stick surface.
  - Refer to AT 1660 SDS, TDS and Application Guide before applying this product.



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## 7. DRYING & CURING TIMES

<b>Solids</b>	23%
<b>Drying Time</b>	Dry to the touch in approximately 15-25 minutes at ambient temperatures. Warmer airflow will accelerate dry time.
<b>Curing Time</b>	Useable ambient cured properties are obtained in approximately 24 hours after application at temperatures of 28°C/79°F at which time the coated parts may be handled and top coated. Full cure (cross-linked) in 5 days. For accelerated curing, place coated part in a convection type oven for 30 minutes at 350°F (176°C). Coating must be dry to the touch prior to elevating the temperature

## 8. COVERAGE RATE

- Approximately 1,875 square feet per gallon (46 square meters per liter) at dry film thickness of 5 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.