NANO-CERAMIC COATING

APPLICATION INSTRUCTIONS

### 1. PRODUCT DESCRIPTION

AT 520 is a high performing primer specifically formulated for ultra high temperature applications (up to 1200°F/648°C). It is a VOC exempt solvent-based primer that provides adhesion in a wide variety of demanding environments. It adheres to almost anything and almost anything will adhere to it. AT 520 can be used as a primer on almost any substrate or as an intra-coating adhesive. AT 520 has been formulated for a broad range of uses including automotive exhaust pipes and direct flame contact.

#### 2. SURFACE PREPARATION

- Primer may be applied directly to substrate surfaces where there are concerns regarding proper adhesion.
- Primer may also be used over other (tightly bonded) cured coatings to achieve good intra-coat adhesion.
- Surface cleanliness is extremely important. The surface should be clean, dry and free from oils and other containments.
- For metal & alloy component surfaces, it is preferable to have a light blasted profile if it is possible to do so. Recommended blasting media is 120 grit aluminum oxide, garnet or equivalent.
- Primer covalently bonds well to plastics and almost all types of metal (including aluminum, titanium, stainless steel and metal oxides).
- For composite substrate surfaces, it is preferable to have a very light abraded profile on the surface if it is possible to do so. This will aid in creating the physical bond.
- Gel-coated surfaces should not be abraded as this may damage the substrate.

# 3. APPLICATION (PRIMER)

- As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.
- Slightly mix or shake the primer contents before applying. Shaking by hand is acceptable.
- Apply to a dry film thickness of 1-3 microns only. More is not better.
- **Spray**: Fine spay tip (0.08) or similar is optimal.
- **Wipe on:** Wet a lint free application cloth and lightly wipe over the substrate surface. If it appears to be too thick, use the same cloth to spread the primer over a larger surface area. A locked mohair roller may also be used.
- If the coating appears to be too thick, quickly use the same cloth or mohair roller to re-wipe and spread the primer over a broader surface area. Do not allow the primer to pool on the surface.
- Primer may be re-applied over itself (re-coated) if it is necessary to do so.

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## 4. APPLICATION (TOP COAT)

- Apply topcoat within 3 minutes of applying primer. Sooner is better. Wet on wet application is acceptable.
- If the primer dries longer than 3 minutes before top coating, re-apply the primer as above. Then apply the topcoat within the allotted 3-minute time limit.
- Not for use with high gloss finishes as the primer tends to reduce the surface gloss under certain conditions.
- Most topcoats are compatible with the primed surface. Contact your ALPHATEK representative for more information.

### 7. DRYING & CURING TIMES

Solids	<38%
Drying Time (Regular)	5-10 minutes at 80°F (26.5°C).
Drying Time (Accelerated)	30 seconds at 120°F (49°C).
Always apply top coat prior to primer drying	

### 8. COVERAGE RATE

Coverage will be approximately 5,160 square feet per gallon (125 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.