

# AT 1400 – ALPHASHIELD

## NANO-CERAMIC COATING

## TECHNICAL DATA SHEET

AT 1400 - AlphaShield gun coating is the premium high performance protective coating for firearms. The coating is tough, durable and provides long term protection against corrosion, weathering, and abrasion. It may be applied to metal and non-metal surfaces. Coating is thermally stable to extreme temperatures (1200°F+/648°C+) and it retains adhesion even after multiple thermal cycles.

Proudly manufactured in the USA.

### Technical Data

<b>Color</b>	Solid Tone Colors
<b>Viscosity</b>	16-16.3 sec. #2 Zahn
<b>Percent of Solids (%)</b>	46
<b>V.O.C</b>	Exempt per CFR 51.1 / Regulation 8
<b>RoHS</b>	Compliant
<b>REACH</b>	Compliant
<b>Halogens</b>	None
<b>Thermal Stability. Resin (cured)</b>	1200°F + / 648.8°C +
<b>Conical Bond (1/4" Mandrel) (ASTM D522-93a)</b>	Passed
<b>Cross Cut Adhesion (ASTM D3359)</b>	5B
<b>Coefficient of Friction (ASTM D2047)</b>	0.05μ
<b>Specific Gravity (ASTM D891-09)</b>	0.9
<b>Pencil Hardness (ASTM D3363)</b>	9h +
<b>Salt Fog Test (ASTM B117)</b>	3500 hours
<b>Odor (liquid)</b>	Slight Solvent
<b>Odor (cured)</b>	None

### Drying and Coverage Rate

<b>Average Applied Dry Film Thickness</b>	5 to 25 microns (0.2 – 1 mil)
<b>Estimated Coverage Rate (@ 15 microns)</b>	1,250 ft <sup>2</sup> (116 m <sup>2</sup> ) per gallon
<b>Dry to Touch Time (@ 77°F / 25°C)</b> *Exposing to a warmer air flow (not exceeding 110°F) will decrease drying time	15 – 25 minutes (average)
<b>Ambient Cure (Full Properties)</b>	5 days
<b>Cure Time (@350°F)</b> *Oven cure only after coating is dry to touch	30 – 40 minutes (average)

### Key Performance Properties

- High performance single component coating.
- Extreme adhesion. Forms covalent bond to the substrate giving it an intrinsic bond to surfaces.
- Very tough and durable.
- Excellent UV, chemical and abrasion resistance.
- High anti-corrosion performance.
- Extreme heat & flame resistance.
- Easy to apply.
- Curable by ambient air (accelerated oven curing possible).
- May be applied to metal and non-metal surfaces.
- VOC exempt.
- RoHS and REACH compliant.

### Common Applications

Any firearm component that requires high temperature protection including suppressor, barrel, muzzle brake, rail and handgrip.

### Supplemental Information

Also available:

- AT 1405 - AlphaShield Grip
- AT 1410 - AlphaShield Ultra for maximum performance
- AT 1420 - AlphaShield Elite (military grade)
- AT 1450 - AlphaShield Bore Coat (dry lubricant)

\*Textured feel can also be added if desired.

\*Available in a wide variety of colors.