

AT 1405 – ALPHASHIELD GRIP

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 1405 - AlphaShield Grip has all the high performance of AT 1400 with the additional benefit of AT's proprietary Wet Grip Technology. AT 1405 feels smooth to the touch but the wetter it gets, the better the grip. 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. Unlike most competing products, AT 1405 also offers high temperature insulation performance in addition to high temperature protection.

Proudly manufactured in the USA.

Technical Data

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

Drying and Coverage Rate

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

Key Performance Properties

- High performance single component coating.
- Wet Grip technology. Coefficient of friction increases when exposed to moisture creating smooth feeling, non-slip performance in wet conditions.
- 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.
- Unparalleled thermal insulation protection.
- 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 1400 - AlphaShield
- 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.