AT 1450 – ALPHASHIELD BORE COAT

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 1450 is the ultimate protective coating for gun bores. It is easy to apply and creates a micron thin, protective ceramic coating on the bore. AT 1450 creates a permanent, significant reduction in fouling (jacket, powder, lead, plastic wad, carbon) thereby reducing maintenance while maximizing the performance and longevity of your weapon. The coating is so thin that it will not negatively impact velocity, point of impact, or group size. Coated bores will need cleaning significantly less often and cleaning itself is much easier. AT 1450 protects against both galvanic and chemical corrosion. A single application will last the useful life of the bore for many firearms. AT 1450 is effective on all types of firearms including rifles, handguns, shotguns and muzzle-loaders. Proudly manufactured in the USA.

Technical Data

Color	Clear
Viscosity	16-18 sec. #2 Zahn
Percent of Solids (%)	14
V.O.C	Exempt per CFR 51.1 / Regulation 8
RoHS	Compliant
REACH	Compliant
Halogens	None
Thermal Stability (cured)	1200°F / 648.8°C
Conical Bond (1/8" Mandrel) (ASTM D522-93a)	Passed
Cross Cut Adhesion (ASTM D3359)	5B
Coefficient of Friction (ASTM D2047)	0.03µ
Specific Gravity (ASTM D891-09)	0.889
Pencil Hardness (ASTM D3363)	8h
Odor (liquid)	Slight Solvent
Odor (cured)	None

Drying and Coverage Rate

Average Applied Dry Film Thickness	2 to 5 microns
Estimated Coverage Rate (@3 microns)	1,900 ft² (180 m²) per gallon
Dry to Touch Time (@ 77°F / 25°C) *Warm airflow will reduce drying time	15 – 25 minutes (average)
Ambient Cure (Full Properties) *Ambient cured properties normally exceed those of oven cure	5 days
Oven Cure (Convection Type Air Flow)	1200°F 30 minutes (Part Temperature)

Key Performance Properties

- High performance, ambient air cured coating with easy wipe-on application.
- Creates a covalent bond to the substrate to become a permanent part of the metallic structure.
- Ultra-thin application will not negatively impact velocity or point of impact.
- Extremely tough & durable for long lasting high performance.
- Extreme high temperature resistance, including to direct flame.
- Excellent corrosion resistance, highly hydrophobic and stops carbon fouling.
- Dry lubrication properties work with or without the use of oil.
- With proper application, a single application will last the useful life of the bore.
- RoHS and REACH compliant.

Common Applications

Gun bores on almost any type of firearm including rifles, handguns, shotguns and muzzle-loaders.

Supplemental Information

AT 1450 does not require the additional use of lubricating oil. Oil may be applied without harming the AT 1450 coating.

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