

AT 4400 – THERMAL PROTECTION COATING

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 4400 - Thermal Protection Coating is specifically formulated to create a thermal barrier for high temperature applications. AT 4400 is effective up to temperatures of 1200°F (648°C). Coating may be applied ultra-thin (3-6 microns) and has excellent adhesion to a wide range of substrates. It is an easy to apply single component coating with a quick drying time. AT 4400 may be used as a stand-alone thermal protection coating or as a topcoat on AT 4410 High Temperature Thermal Protection Coating. Multiple layers of AT 4400 coating may be applied until the overall desired insulation performance is achieved.

Proudly manufactured in the USA.

Technical Data

Color	Semi-Transparent Liquid
Viscosity	18-23 sec. #2 Zahn
Percent of Solids (%)	<65
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 (1/8" Mandrel) (ASTM D522-93a)	Passed
Cross Cut Adhesion (ASTM D3359)	5B
Specific Gravity (ASTM D891-09)	0.810
Odor (liquid)	Slight Solvent
Odor (cured)	None

Drying and Coverage Rate

Average Applied Dry Film Thickness	3 to 6 microns
Estimated Coverage Rate (@ 3 microns)	8,830 ft ² (820 m ²) per gallon
Dry Time Between Coats (@ 110°F / 44.3°C)	10 – 15 minutes (Average)
Dry Time (@ 120°F / 48.89°C)	30 minutes

Key Performance Properties

- Excellent insulation/thermal barrier.
- Excellent adhesion to almost any surface.
- Creates an intrinsic covalent bond with most substrates.
- Easy to topcoat.
- Remains flexible.
- Smooth, semi-transparent finish.
- Extremely high operating temperature.
- Thin application.
- Excellent coverage rate.
- One component coating that is easily applied by brush or HVLP sprayer.
- Ambient cure, short dry time.
- Environmentally friendly. VOC exempt.
- RoHS and REACH compliant.

Common Applications

- Build up thermal barrier for high temperature applications.
- Top coat for AT 4410 High Temperature Insulation Coating.

Supplemental Information

AT 4400 is compatible with AT 4410 Insulation Coating. Contact your AlphaTek representative for more information.