

AT 1300AG – PROTEK AG SERIES

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 1300 AG - AG Protek AG Series offers unparalleled protection of electronic components from heat, moisture, and other contaminants. The AT 1300AG series has been specifically formulated for use on electronics. All AT 1300AG Series coatings are fluoropolymer free. The coatings are easy to apply and offer best in class moisture protection. The AT 1300AG Insulation Series have been specifically designed to effectively block thermal energy. These coatings are extremely effective for systems requiring thermal energy to be blocked to protect vulnerable components. Available in both clear and black.

Proudly manufactured in the USA.

Technical Data

Color	Opaque (Semi-Clear) or Black
Viscosity	20 - 30 sec. #2 Zahn
Percent of Solids (%) – AT – 1304AG	24
Percent of Solids (%) – AT – 1305AG	28
V.O.C	Exempt per CFR 51.1 / Regulation 8
RoHS	Compliant
REACH	Compliant
Halogens	None
Thermal Stability (cured)	1600°F (871.1°C)
Conical Bend (1/8" Mandrel) (ASTM D522-93a)	Passed
Cross Cut Adhesion (ASTM D3359)	5B
Direct Impact (ASTM D2794-93)	130lbs
Specific Gravity (ASTM D891-09)	1.04 ± 2%
Pencil Hardness (ASTM D3363)	7h (Ambient Cure)
Odor (liquid)	Slight Solvent
Odor (cured)	None

Drying and Coverage Rate

Average Applied Dry Film Thickness	12 to 25 microns
Estimated Coverage Rate (@15 microns)	650 ft ² (60 m ²) per gallon
Estimated Coverage Rate (@25 microns)	460 ft ² (42 m ²) per gallon
Ambient Cure (@ 75°F (23.8°C))	5 days

Key Performance Properties

- Thermal management via thermal insulation.
- Electrically non-conductive
- Highly hydrophobic.
- Extreme anti-corrosion.
- Excellent adhesion.
- Thin film thickness (12 – 25 microns) Available in clear, semi-clear and black.
- One component coatings.
- Applied via spray, wipe or dipping.
- Quick drying with ambient air cure (accelerated heated curing possible).
- Single coat required for vast majority of applications.
- No odor or fumes when heated.
- Inert material once cured.
- Environmentally friendly – contains no fluorocarbons.
- RoHS, REACH and WEEE compliant.

Common Applications

- PCBAs / electronic circuit boards
- Consumer Electronics
- Wearables
- Optics
- Micro-motors
- Connectors
- Sensors

Supplemental Information

AT 1300AG Series have the same basic application, hydrophobic and adhesion properties. Some formulations have higher solids content that result in higher dry film thickness and therefore maximizes water resistance and thermal protection. Contact your AlphaTek representative for further information.