

ECOAT SOLUTIONS

PRODUCT DATA SHEET

ECoAT ECS 1300-1303 SERIES

ELECTRONICS AEROGEL THERMAL MANAGEMENT HEAT TRANSFER MICRO-COATING

TYPICAL APPLICATIONS

- PCBAs / ELECTRONIC CIRCUIT BOARDS
 - CONSUMER ELECTRONICS
 - MICRO-MOTORS
 - CONNECTORS
 - WEARABLES
 - SENSORS
 - OPTICS

KEY FEATURES

- THIN FILM THICKNESS & AVAILABLE IN CLEAR, SEMI-CLEAR AND BLACK
- SINGLE COMPONENT COATINGS APPLIED VIA DIPPING, SPRAY, OR WIPE
- NO ODOR OR FUMES WHEN HEATED & INERT MATERIAL ONCE CURED
- ENVIRONMENTALLY FRIENDLY – CONTAINS NO FLUOROCARBONS.
 - MOLECULAR ADHESION & ELECTRICALLY NON-CONDUCTIVE
 - ULTRAHYDROPHOBIC & EXTREME ANTI-CORROSION
 - ROHS, REACH AND WEEE COMPLIANT

ECS 1300-1303 Series offers unparalleled protection of electronic components from heat, moisture, and other contaminants. The ECS 1300-1303 Series has been specifically formulated for use on electronics and are fluoropolymer free. The coatings are easy to apply and offer best in class moisture protection. The ECS 1300-1303 Series products have been specifically designed to quickly and efficiently conduct and diffuse heat, making them the perfect coating for systems requiring thermal energy to be transmitted away from vulnerable components.

Technical Data		Drying and Coverage Rate
Color	Opaque (Semi-Clear) or Black	Average Applied Dry Film Thickness
Viscosity	20 - 30 sec. #2 Zahn	2 to 10 microns
Percent Solids – 1304AG	24	Estimated Coverage Rate (18% Solids @ 3 microns)
Percent Solids – 1305AG	28	2,450 ft ² (230 m ²) per gallon
V.O.C	Exempt per CFR 51.1 / Regulation 8	Dry to Touch Time (@ 75°F / 25°C)
RoHS	Compliant	460 ft ² (42 m ²) per gallon
REACH	Compliant	Ambient Cure (@ 75°F / 25°C)
Halogens	None	Full Properties in 35-45 minutes (Cure 24 hours for best performance)
Thermal Stability (cured)	1600°F (871.1°C)	Supplemental Application Data All ECS 1304G-1310AG Series products have the same basic application, ultrahydrophobic, and adhesion properties. Some formulations have higher solids content that result in higher dry film thickness maximizing water resistance and thermal protection. Contact your eCoat representative for further information.
Conical Bend (1/8" Mandrel) (ASTM 522-3a)	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	

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