

ECOAT SOLUTIONS

PRODUCT DATA SHEET

ECS 4400

HIGH TEMPERATURE THERMAL PROTECTION COATING

ECS 4400 - Thermal Protection Coating is specifically formulated to create a thermal barrier for high temperature applications. ECS 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. ECS 4400 may be used as a stand-alone thermal protection coating or as a topcoat on ECS 4410 High Temperature Thermal Protection Coating. Multiple layers of ECS 4400 coating may be applied until the overall desired insulation performance is achieved. ECS 4410 may be applied to almost any metal, composite, or semi-rigid plastic substrate.

Proudly manufactured in the USA.

Technical Data

Color	Semi-Transparent
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 (cured)	1200+°F ((648.8+°C
Conical Bond (1/8" Mandrel) (ASTM D522-93a)	Passed
Cross Cut Adhesion (ASTM D3359-02)	5B
Specific Gravity (ASTM D891-09)	0.810
Odor (liquid)	Slight Solvent
Odor (cured)	None

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.

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
Estimated Coverage Rate (@ 6 microns)	4,415 ft ² (410 m ²) per gallon
Dry Time Between Coats (@ 110°F (44.3°C))	10-15 minutes
Forced/Heated Air Dry Time (@ 120°F (48.89°C)) *Coating must be dry to touch prior to oven curing.	30 minutes

Common Applications

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

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