

Product Description

Aeripel™ APW100 is a two-component water-based nanocomposite protective layer (NPL) designed to protect aerospace substrates from corrosion damage. AeroPel has excellent properties in creating a low-energy surface to disperse moisture and prevent penetration into the metallic substrate.

Intended Use

AeroPel™ APW100 can be applied directly to aluminum or over existing primer/topcoat systems.

Product Data

Finish:	Semi-Gloss
Color:	Transparent
Components:	Part A and Part B
Volume Ratio:	30:1
Mass Density:	9.18 lb./gal (1.1 g/cm ³)
Viscosity:	Zahn #1, 34 seconds
Volume Solids:	18% ± 2%, mixed
VOC (mixed):	< 50 g/L
Induction:	None
Thinner:	None
Shelf Life:	12 months
Storage:	35 – 115 °F (2 – 46 °C) *Do not allow to freeze
Pot Life:	24 hours
Clean Up:	Water, 70+% Isopropyl Alcohol

Recommended Thickness	
Final DFT	1.0 – 2.0 mils
WFT per coat	3.0 – 5.0 mils
Number of Coats	2.0 +
Theoretical Coverage	290 ft ² /gal @ 1 mil

*Vertical surface may require less WFT and more coats.

Application Times (25 °C / 60% RH)	
Dry To Touch (Recoat)	60 mins
Cure to Service	24 hours

*Longer recoat windows may be required at higher humidities.

Surface Preparation

Apply APW100 to a clean, dry, contaminant-free and water-break-free surface. A wide range of preparation techniques are applicable for various substrates. It is recommended to refer to your specific application requirements and the *APW100 Application Guide* for step-by-step instructions.

Application

Conventional Spray		Roller	Brush
<i>Gun:</i>	HVLP	<i>Cover:</i>	<i>Bristle:</i> Synthetic
<i>Tip Size:</i>	1.8 mm	High Density Foam	Polyester/Nylon
<i>Air Quality:</i>	Clean & Dry per ASTM D4285		High Density Foam

Environmental Conditions

	<u>Temperature</u>		<u>Relative Humidity</u>
Ambient Air	50 °F – 110 °F	Application advised:	RH <65%
Substrate	50 °F – 110 °F	Application cautioned:	65% < RH < 80%
Material	50 °F minimum	Application not recommended:	RH >80%

Considerations

Combine Part A and Part B in a 30:1 volume ratio. For 5-gallon kits, mix for 15 minutes, for 1-gallon kits, mix for 10 minutes, and for 1-quart kits, mix for 5 minutes. Apply on a test surface prior to application to adjust equipment for optimal surface finish quality. Refer to the APW100 Application Guide for more information.

Safety

Refer to the APW100 Safety Data Sheet (SDS) and Application Guide. You may download these documents at <https://aeropeltechnology.com/>.

Disclaimer

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Aeropel™ APW100 is not currently qualified under any specification, although it may be used in conjunction with existing coating systems.

Warranty

Oceanit warrants APW100 to be free of manufacturing defects upon departure from origin facility. Oceanit's sole obligation under this warranty shall be, at Oceanit's election, to repair, replace or refund the purchase price of the defective product. No other warranty or guarantee of any kind is made, implied, or expressed regarding performance and application of product and the surfaces they are applied to. Oceanit has no control over the quality of application nor preparation of surfaces.