

Park Aerospace Composite Materials



Electroglide® is an epoxy-based composite surfacing film with embedded metal mesh that is designed to protect aircraft composite parts from lightning strikes.

Key Features & Benefits

- Provides protection from lightning strikes
- Provides a high quality paintable surface
- Minimizes surface porosity
- Natural color
- Co-cure compatible with most epoxy prepreg materials
- UV resistant
- Manufactured with E-780-1 resin

Product Forms

- 0.030 psf standard weight surfacing film with woven fiberglass reinforcement
- 0.015 psf Cu mesh
- 0.022 psf Cu mesh
- 0.040 psf Cu mesh
- 0.016 psf Al mesh
- Other metal mesh weights available upon request
- 36" wide standard rolls

Prepreg Storage Life

- Out Life: 30 days @ 75°F
- Shelf Life: 6 months @ 40°F
12 months @ 0°F

Product Overview

Applications

- Primary and Secondary Aircraft Structure Surfaces

Features

- Lightning Strike Protection
- Painted or Unpainted Composite Surfaces
- UV Protection (for unpainted or green structures)
- Zone 1C High Voltage 330 μ m min. painted test panel example
- Available in Natural or Black

Global Availability

For Information about Park's materials:

Americas	+1.316.283.6500
Asia Pacific	+656.861.7117
Europe	+33.562.985290
info@parkelectro.com	
www.parkelectro.com	



Cured Properties				
Color	NAT	NAT or BLK	NAT	NAT
Metal Mesh Type (lb/ft ²)	0.015 Cu	0.022 Cu	0.040 Cu	0.016 Al
Reinforcement Areal Weight (gsm)	47	17	47	47
Prepreg Areal Weight lb/ft ² (gsm)	0.045(220)	0.057(279)	0.070(342)	0.046(225)
Dry Resin Content (%)	47	52	30	46
Resin Flow (260°F, 150 psi) (%)	20	22	1	0.1
Gel time @ 250°F/121°C, minutes	25	62	25	25
Gel time @ 350°F/177°C, minutes	0.8	0.8	0.8	0.8
Volatiles (350°F/177°C, 60 min) (%)	<1.0	< 1.0	<1.0	<1.0
Cured Single Ply Thickness (in)	0.0035	0.0040	0.0065	0.0080

Processing Guidelines

Autoclave/Oven Cure Cycle

- Cure cycle based on underlying epoxy prepreg material
- Electroglide® surfacing film can be cured using autoclave or vacuum/oven cure cycles
- Electroglide® surfacing film is co-cure compatible with both 250°F and 350°F epoxy cure cycles. For cure cycles below 250°F or above 365°F contact your local sales and technical service representative or Customer Service at Park Aerospace Technologies Corp. at +1.316.283.6500

Note: The following guidelines are provided to assist Park material users with general recommendations for successful processing. The recommendations are for general review purposes only and process adjustments may be required to achieve optimum results in your specific manufacturing environment.

All test data provided are typical values and not intended to be specification values. For review of critical specification tolerances, please contact a Park representative. Park reserves the right to change these typical values in the process of refining its testing equipment and techniques and to change any product. Park does not assume any liability arising out of the application or use of any product and does not convey any license under its patent or other rights or the rights of others. Park disclaims all warranties whether expressed, implied or statutory, including implied warranties of merchantability or fitness for a particular purpose.

Given the variety of factors that can affect the use and performance of Park's products, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and/or suitable for the user's method of application. These factors may include, but are not limited to, the materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform.

Aeroglides®, CoreFix®, Easycure E-710®, Electroglide®, SIGMA STRUT™ and Tin City Aircraft WorksSM are trademarks of Park Electrochemical Corp.



Lightning Strike Representative Testing Tested to Zone 1C Requirements

Top Panel Surface
(painted)



Bottom Panel Surface
(unpainted)



Figure 8 – Panel 032-1

No through hole penetration, Copper side against tool.