



**LC163
Silicone Prepreg**

LC163 is a silicone prepreg system that produces laminates with low dielectric losses. LC163 laminates are thermally stable and moisture resistant. Laminates can be used in radomes, aircraft ductwork, coil forms, electric arc barriers and motor slot liners.

Properties of LC163-181, E-glass Fabric

Tensile Strength, psi	
at 77°F	34,000
Flexural Strength, psi	
at 77°F	33,000
at 77°F (aged 12 hours at 500°F)	32,000
at 500°F	9,000
at 500°F (aged 12 hours at 500°F)	12,400
Flexural Modulus, psi	
at 77°F	2,600,000
at 500°F	1,500,000
Compressive Strength, psi	
at 77°F	15,000

Properties of LC163-181, E-glass Fabric

Water Absorption, (24 hour immersion)	<0.5%
Coefficient of Thermal Expansion (in/in/F)	2.6 x 10 ⁻⁶
Thermal Conductivity, BTU/hr/ft/in/F	0.7
Arc Resistance, seconds	250
Electric Strength, volts/mil	110
Dissipation Factor at 77°F	
at 60 cps	0.020
at 1,000,000 cps	0.002
Dielectric Constant at 77°F	
at 60 cps	4.2
at 1,000,000 cps	3.9

NOTE: The data presented herein has been developed under controlled manufacturing and test conditions and is considered accurate. No warranty is expressed or implied regarding the accuracy or use of this data or the use of this product. It is the responsibility of the end user to determine suitability for use.



PROCESS INFORMATION - LC163

CURE CYCLE:

5°F/Minute Ramp to 350°F
Hold at 350°F for 30 to 45 minutes
Cool to Less Than 180°F at 3 to 5°F/Minute
Release Pressure/Vacuum and Demold

NOTE: Pressures as low as 10 psi have been used to mold parts.

POST CURE:

16 Hours at 195°F
2 Hours at 260°F
2 Hours at 350°F
2 Hours at 390°F

NOTE: Post cure is required for optimum properties.

Recommended Storage

- Room Temperature (77° F)	Four (4) Weeks
- 40° F	Six (6) Months