



LC310 Polyester Prepreg

LC310 is a high performance polyester prepreg that is used in a wide variety of applications including: ballistic armor, structural components, recreational equipment and radomes. LC310 has an outstanding combination of strength and toughness.

Properties of LC310-7781 Glass Fabric

Flexural Strength, psi	90,000
Flexural Modulus, psi	3,450,000
Tensile Strain, psi	62,000
Tensile Modulus, psi	3,240,000
Compressive Strength, psi	63,000
Compressive Modulus, psi	3,300,000
Interlaminar Shear Strength, psi	7,200
Dielectric Constant at 7.7 GHZ	4.40
Loss Tangent at 7.7 GHZ	0.013

PROCESS INFORMATION – LC310

Vacuum Bag in Autoclave Cycle

Draw vacuum and apply 40-60 psi autoclave pressure
5° F/minute ramp to 175° F (optional – thermocouple in material)
Hold at 175° F for 30 to 40 minutes (optional)
5° F /minute ramp to 275° F - 285° F
Hold at 275° F - 285° F for 60 to 90 minutes
Cool to less than 180° F at 3 to 5° F/minute
Release pressure/vacuum and demold

Vacuum Bag in Oven Cycle

Draw vacuum
5° F/minute ramp to 175° F (optional)
Hold for 30 to 45 minutes (optional)
5° F/minute ramp to 275° F - 285° F
Hold for 60 to 90 minutes
Cool to less than 180° F at 3 to 5° F/minute
Release vacuum and demold

Press Cycle

Heat tool 275° F to 285° F, 60 psi, hold for 60 to 90 minutes.

Recommended Storage

- Room Temperature (77° F)	Two (2) Weeks
- 40° F	Six (6) Months
- 0° F	Twelve (12) Months

NOTE: LC310 Prepreg is wound with a polyethylene film liner for easy release. The rolls are sealed in polyethylene film bags to protect prepreg from moisture and other contaminants. The bags should remain sealed while the prepreg is under refrigeration and only removed when the prepreg has had sufficient time to warm to room temperature. When not in use, the prepreg should be returned to refrigerated storage. Care should be exercised to limit out-time of the prepreg in order to insure maximum shelf life. Torn bags should be replaced.

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