



## LC421 Vinyl Ester Prepreg

LC421 is a high performance Vinyl Ester prepreg resin that is specifically designed for ballistic armor applications. It is styrene free and is capable of snap curing in 20 minutes at 275° F.

### Properties of LC421/Kevlar Style Fabric

Resin Content	18 to 22%
% Volatile Content	3.5% Max
Fiber Type	Kevlar K29
Fiber Denier	3000
Weave Type	Plain
Count	17 by 17
Areal Weight	14.0 osy (Nominal)

### PROCESS INFORMATION – LC421

#### Vacuum Bag in Autoclave Cycle

Draw vacuum and apply 65 - 80 psi minimum 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  
Hold at 275° F Minimum for 20 minutes (thermocouple in material)  
Cool to less than 180° F at 3 to 5° F/minute  
Release pressure/vacuum and demold

#### Press Cycle

Place Laminate Stack in Platen Press set to 275° F  
Apply 80 psi pressure minimum  
Hold at 275° F Minimum for 20 minutes (thermocouple in material)  
Release Pressure and Remove Laminate Stack From Press

### Recommended Storage

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

NOTE: LC421 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.