

LC296 PHENOLIC PREPREG

LC296 is a snap curing phenolic prepreg system tailored for press molding in a variety of aircraft interior applications. LC296 provides extremely low OSU heat release combined with low smoke, self extinguishing, and excellent self adhesive properties and surface finish. LC296 is suitable for crushed core as well as flat honeycomb sandwich panel molding.

FEATURES AND BENEFITS

- Self-extinguishing. Meets FAR 25-853 flammability requirements
- Extremely low heat release (30/30)
- Very good adhesion over a wide range of curing/ laminating conditions
- Snap-curing (<20 min. in press molding)

PRODUCT FORMS

- LC296 is available as a woven fabric prepreg in a wide variety of reinforcements including carbon and glass.
- Standard fabric prepreg widths: 36", 50", 60"

PHYSICAL PROPERTIES

Fiber Reinforcement Type	7781 E-Glass
Fiber Areal Weight (gsm)	301
Resin Content (% by wt.)	26-36
Volatiles (% max)	5
Cured per Ply Thickness	0.009" (0.23mm)

LAMINATE PROPERTIES

Fiber Reinforcement Type	Units	7781 E-Glass
Cure Type for Evaluation		Press
Tensile Strength	Ksi (MPa)	71 (489)
Tensile Modulus	Msi (GPa)	3.3 (23)
Short Beam Shear Strength	Ksi (MPa)	6.4 (44)
Long Beam Flexural Strength	Ksi (MPa)	27 (186)
Climbing Drum Peel	in-lbs/3 inch width	27
Flatwise Tensile Strength	Ksi (MPa)	250 (1.7)

Note: Room temperature, dry condition. Values are average and do not constitute a specification.



FLAMMABILITY PROPERTIES: LC296 - 7781

Fiber Reinforcement Type	Units	7781 E-Glass
OSU, Peak Heat Release Rate	kw/m ²	<30
OSU, Total Heat Release Rate	kw/min/m ²	<30
Specific Optimal Density (ASTM E662-96)	Ds	<10

Laminate Thickness	Inches	0.100"
30 Second 45° Vertical		
Extinguish time	seconds	0
Afterglow	seconds	0
Flame Penetration		None
60 Second Vertical		
Time to Extinguish	seconds	0
Burning Length	inches	2.6
Drip Extinguish time	seconds	No Drip

PROCESS INFORMATION

The following are general recommendations for successful processing. Adjustments may be required to achieve optimum results in your specific manufacturing environment.

Press Molding Cycle

- 15 - 20 min. at 265°F - 275°F, 25 - 60 psi. bumps no later than 2 min. into cycle, in hot/out hot

Shelf Life	
Room Temperature (77°F)	5 days
0°F	6 months

Quality Certifications - Barrday Composite Solutions is ISO9001 and AS9100 certified.

Note: LC296 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. The data presented herein has been developed under controlled manufacturing. 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.

