



Adhesive Prepregs for Composite Manufacturers, LLC

DA 409U/G35 150 Unidirectional Carbon Epoxy Prepreg System

DESCRIPTION

DA 409U/G35-150 is a tough, versatile, modified epoxy resin prepreg that cures at 250°F, a standard modulus 150 g/m² carbon prepreg tape which can be also be supplied as a 200g/m² or a 300 g/m² prepreg .

PHYSICAL PROPERTIES

Weight:	0.058 lbs./sq ft
Resin Content:	48% by Weight
Fiber wt.	150GSM
Volatiles:	Less than 1%
Tack:	Medium
Resin Flow:	22% average
Gel Time:	12 minutes +/- 3 at 250°F
Shelf Life:	One year at 0°F Six months at 40°F Thirty days at 75°F
Standard Roll:	per customer request.

MECHANICAL PROPERTIES

Cure Cycle:	Press cured for one hour at 250°F and 50 psi
pressure	
Thickness:	0.006 inch/ply 42% by
Resin Content:	Weight
Flexural Strength	(ASTM D 790) 224 Ksi
Flexural Modulus	(ASTM D 790) 18.9 Msi
Beam Sheer	(ASTM D 2344) 13.8 Msi
Tensile Strength	(ASTM D 3039) 324 Ksi
Tensile Modulus	(ASTM D 3039) 19.8 Msi

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CURE CYCLE

The prepreg may be cured using either standard heat-up methods or by in-hot, out-hot press applications, other curing methods may be used such as vacuum bagging or auto clave . A pressure of 30 psi is recommended, however pressures of 10 to 50 psi may be used.

STORAGE

Store material in a contaminate free container and store at 0 degrees F for extended storage. For shorter storage time requirements store at 40 degrees F, this enables quicker stabilization times.

APPLICATION

Remove material from cold storage at least 20 hours prior to use to allow for stabilization at room temperature. Keep the material wrapped to prevent moisture from condensing on the adhesive. Cut the prepreg to size, remove the poly separator and apply to part or mold. Remove separator paper. Continue process until the desired number of plies are obtained.

When lay-up is complete, the prepreg can be cured in a vacuum bag in an oven or autoclave. Apply at least 10 psi pressure and cure for one hour at 250°F.

CLEAN UP

The adhesive can be removed from non-bonding areas with ketones or methylene chloride. Be sure to follow all Material Safety Data Sheet (MSDS) guidelines for the solvent to be used.

CAUTION

This material contains epoxy resins and amines which may cause irritation to sensitive skin. Avoid contact with eyes or skin. If contact with skin occurs, wash as soon as possible with soap and water. If contact with eyes occurs, flush with water for 15 minutes. Do not handle or use this material until Material Safety Data Sheet has been read and understood. The user of this material is required to use the necessary protective equipment as directed by applicable state and federal laws when handling, curing, and grinding this material.

IMPORTANT NOTICE

Information in this data sheet has been obtained under controlled laboratory conditions and is believed to be accurate. Properties listed are typical values and are not intended for use in preparing specifications. Actual values may vary. No warranty is expressed or implied for which APCM assumes legal responsibility. APCM cannot be responsible for misapplication or handling and use under conditions beyond its control and under no circumstances shall be liable for incidental or consequential damage resulting from handling or use of this material.