



DA 409/E250 Unidirectional E-Glass Epoxy Prereg System

DESCRIPTION

DA 409/E250 is a modified epoxy system coated on unidirectional E-Glass fibers. This product is designed to build excellent unidirectional strength using required plies.

PHYSICAL PROPERTIES

Uncured	Weight:	0.078lbs./sq ft
	Thickness:	0.009" per ply
	Resin Content:	50% by Volume 30% by Weight
Cured:	The cured properties were obtained using a press cure of two hours at 275°F with 25 psi.	
	Thickness:	0.009" per ply
	Void Content:	Less than 1% by Volume
	Volatiles:	Less than 1%
	Shelf Life:	One year at 0°F Six months at 40°F 20 days at 75°F
	Standard Roll:	12 inches wide by 120 yards

MECHANICAL PROPERTIES

Cure Cycle:	Press cured for one hour at 250°F and 50 psi pressure		
Thickness:	0.006 inch/ply		
Resin Content:	38% by Weight		
Flexural Strength	(ASTM D 790)	@ 75°F	170 ksi
Flexural Modulus		@ 75°F	6.25 msi
Tensile Strength	(ASTM D 3039)	@ 75°F	150 ksi
Tensile Modulus		@ 75°F	6.4 msi
Beam Shear	(ASTM D 2344)	@ 75°F	10,328 psi

ADHESIVE PREPREGS FOR COMPOSITES MANUFACTURERS
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DA409/E250 prepreg

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 200°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.

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