



# DA 4080/4082 Epoxy Prereg System

## DESCRIPTION

DA 4080 and DA 4082 are 200°F cure modified epoxy prepreg systems which can be prepregged on fiberglass fabric, woven kevlar, or other woven fabrics. In addition to their low temperature cure capabilities, DA 4080 prepregs have excellent flow to allow for vacuum bag cure conditions. DA 4080 is a one sided pre-impregnated system yielding a single sided tack material. DA 4082 is the same system except that both sides of the fabric are coated yielding a double sided tack material. Both prepregs can be used for laminating and honeycomb sandwich construction.

## PHYSICAL PROPERTIES

Form:	Moderate tack resin on woven fabric
Carrier:	Any commercial woven fabric
Color:	Off White
Resin:	Content may be specified by customer
Volatiles:	Less than 1%
Separator:	Release paper and poly film
Shelf Life:	One year at 0°F in a sealed container Six months at 40°F Twenty days at 75°F
Standard Roll:	750 square feet at 50 inches wide

## MECHANICAL PROPERTIES

Based upon a 0.125 inch thick cured laminate of DA 4080 prepreg containing 7781 glass at a 38% resin content. Laminates were cured at 250°F (121°C) for one hour at 20 psi.

Tensile Strength	50,000 psi
Tensile Modulus	3.2 X 10 <sup>6</sup> psi
Flexural Strength	75,000 psi
Flexural Modulus	3.2 X 10 <sup>6</sup> psi
Compressive Strength	55,000 psi
Short Beam Shear	9,000 psi

## ADHESIVE PREPREGS FOR COMPOSITES MANUFACTURERS

**P.O. BOX 264 1366 NORWICH RD. PLAINFIELD CT 06374**

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## CURE CYCLE

The recommended cure cycle for DA 4080 and DA 4082 prepregs is one hour at 200°F at 20 psi.

## 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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