



# HexPly® 916

120°C curing epoxy matrix



## Product Data Sheet

### Description

HexPly 916 is a self-extinguishing modified epoxy matrix system with very high self adhesive properties. It is an ideal system for single shot honeycomb sandwich manufacture, with good drape characteristics. HexPly 916 exhibits excellent environmental resistance, and good service temperature capability.

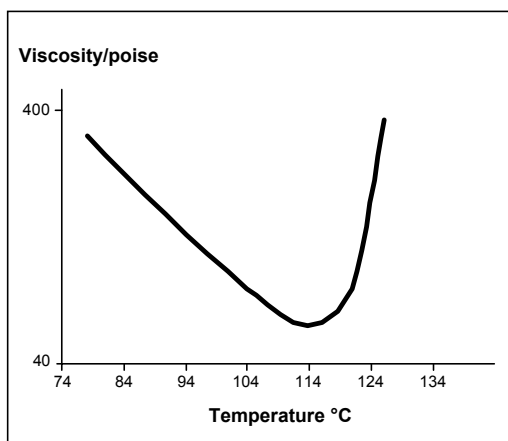
HexPly 916 prepregs are only available in fabric form.

### Benefits and Features

- Self-extinguishing.
- High strength retention to 120°C.
- Excellent adhesion to honeycomb.
- Suitable for a range of cure pressures (0.8 to 10 bar).
- Tough matrix system.
- Low tack.

### Resin Matrix Properties

#### Rheology





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### Cured Matrix Properties

		<i>Method</i>
Tensile Strength	50 MPa	ISO R527 Type 1
Tensile Modulus	4.17 GPa	ISO R527 Type 1
Tensile Strain	1.4%	ISO R527 Type 1
Poisson's Ratio	0.373	ISO R527 Type 1
Calculated Shear Modulus	1.52 GPa	ISO R527 Type 1
Flexural Strength	92 MPa	ISO 178
Flexural Modulus	3.78 GPa	ISO 178
Compression Strength	151.7 MPa	ISO 604
Compression Strain	10.3%	ISO 604
Glass Transition Temperature ( $T_g$ )	146°C	DMTA
Cured Resin Density	1.30 g/cm <sup>3</sup>	

### Prepreg Curing Conditions

1 hour at 120°C up to 500kN/m<sup>2</sup> (5 bar) pressure. Heat up rate up to 5°C/min.

Alternative cure cycle: 30 minutes at 130°C.

### Prepreg Storage Life

- Tack Life @ 23°C 30 days
- Guaranteed Shelf Life @ -18°C 12 months (minimum)

### Precautions for Use

The usual precautions when handling uncured synthetic resins and fine fibrous materials should be observed, and a Safety Data Sheet is available for this product. The use of clean disposable inert gloves provides protection for the operator and avoids contamination of material and components.

### For more information

Hexcel is a leading worldwide supplier of composite materials to aerospace and industrial markets. Our comprehensive range includes:

- HexTow® carbon fibers
- HexFlow® RTM resins
- Acousti-Cap® sound attenuating honeycomb
- HexForce® reinforcements
- Redux® adhesives
- Engineered core
- HexPly® prepregs
- HexTool® tooling materials
- Engineered products
- HexMC® molding compounds
- HexWeb® honeycombs

For US quotes, orders and product information call toll-free 1-800-688-7734. For other worldwide sales office telephone numbers and a full address list, please go to:

<http://www.hexcel.com/contact/salesoffice>

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