**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**

![Viscosity vs Temperature Graph](image-url)
Cured Matrix Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>50 MPa</td>
<td>ISO R527 Type 1</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>4.17 GPA</td>
<td>ISO R527 Type 1</td>
</tr>
<tr>
<td>Tensile Strain</td>
<td>1.4%</td>
<td>ISO R527 Type 1</td>
</tr>
<tr>
<td>Poisson's Ratio</td>
<td>0.373</td>
<td>ISO R527 Type 1</td>
</tr>
<tr>
<td>Calculated Shear Modulus</td>
<td>1.52 GPa</td>
<td>ISO R527 Type 1</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>92 MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>3.78 GPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Compression Strength</td>
<td>151.7 MPa</td>
<td>ISO 604</td>
</tr>
<tr>
<td>Compression Strain</td>
<td>10.3%</td>
<td>ISO 604</td>
</tr>
<tr>
<td>Glass Transition Temperature ($T_g$)</td>
<td>146°C</td>
<td>DMTA</td>
</tr>
<tr>
<td>Cured Resin Density</td>
<td>1.30 g/cm³</td>
<td></td>
</tr>
</tbody>
</table>

Prepreg Curing Conditions
1 hour at 120°C up to 500kN/m² (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
- HexForce® reinforcements
- HexPly® prepregs
- HexMC® molding compounds
- HexFlow® RTM resins
- Redux® adhesives
- HexTool® tooling materials
- HexWeb® honeycombs
- Acousti-Cap® sound attenuating honeycomb
- Engineered core
- Engineered products

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