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&lt;sub&gt;g&lt;/sub&gt;)</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 (maximum from date of manufacture)

### 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<sup>®</sup> carbon fibers
- HexForce<sup>®</sup> reinforcements
- HiMax<sup>®</sup> multiaxial reinforcements
- HexPly<sup>®</sup> prepregs
- HexMC<sup>®</sup>-i molding compounds
- HexFlow<sup>®</sup> RTM resins
- HexBond<sup>™</sup> adhesives
- HexTool<sup>®</sup> tooling materials
- HexWeb<sup>®</sup> honeycombs
- Acousti-Cap<sup>®</sup> sound attenuating honeycomb
- Engineered core
- Engineered products
- Polyspeed<sup>®</sup> laminates & pultruded profiles
- HexAM<sup>®</sup> additive manufacturing

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:

[https://www.hexcel.com/contact](https://www.hexcel.com/contact)