Description
HexPly 1458 is a self-extinguishing and self-adhesive modified epoxy resin system for monolithic and sandwich structures. HexPly 1458 has excellent temperature and moisture resistance. It has a versatile cure cycle at 160°C to 180°C and it has an excellent shelf life at room temperature.

HexPly 1458 prepregs are only available in fabric form.

Benefits and Features
- Self extinguishing.
- Self adhesive on honeycomb and foam.
- Controlled flow matrix.
- Excellent tack life.
- Suitable for a range of pressure (0.8 to 5 bar).
- Versatile cure regime 160 - 180°C.

Resin Matrix Properties

![Rheology](chart1.png)

![Gel Time](chart2.png)
Cured Matrix Properties (cured at 175°C)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire behaviour</td>
<td>Pass</td>
<td>FAR 25853 apd F part 1</td>
</tr>
<tr>
<td>Glass Transition Temperature (°C)</td>
<td>145-155</td>
<td>DMA</td>
</tr>
<tr>
<td>Cured resin density</td>
<td>1.26 g/cm³</td>
<td></td>
</tr>
</tbody>
</table>

Prepreg Curing Conditions
HexPly 1458 can be cured using two alternative cycles, at a pressure between 0.8 and 5 bar.

Heat up rate 1°C to 3°C.

<table>
<thead>
<tr>
<th>Temperature °C</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>3 hours</td>
</tr>
<tr>
<td>180</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

Prepreg Storage Life
- Out Life @ 23°C ± 2°C 60 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® carbon fibers
- HexForce® reinforcements
- HiMax® multiaxial reinforcements
- HexPly® prepregs
- HexMC®-i molding compounds
- HexFlow® RTM resins
- HexBond™ adhesives
- HexTool® tooling materials
- HexWeb® honeycombs
- Acousti-Cap® sound attenuating honeycomb
- HexAM® additive manufacturing
- Engineered core
- Engineered products
- Polyspeed® laminates & pultruded profiles

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

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