Description
HexPly® XF3+V24 is a new range of epoxy surface film providing excellent surface finish and requiring minimum preparation for painting. It is suitable for automotive parts that require an excellent surface finish.

HexPly® XF3+V24 is co-curable with a range of HexPly® prepregs that can cure at 120°C and 180°C. It is available in 300 gsm.

Benefits
- Easy to handle, good tack and drapability.
- Easy to sand.
- Can be co-cured with HexPly® M10R, M49, M47.
- Excellent resistance to aging tests (e.g. +80/-40°C cycles up to 80% relative humidity).

Properties of uncured film

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Weight of resin</td>
<td>300 g/m² +/-20</td>
</tr>
<tr>
<td>Weight of carrier</td>
<td>2 x 12 g/m²</td>
</tr>
<tr>
<td>Density</td>
<td>1.5</td>
</tr>
<tr>
<td>Cure ply thickness</td>
<td>0.2 mm</td>
</tr>
<tr>
<td>Gel time at 120°C</td>
<td>9.4 min</td>
</tr>
<tr>
<td>Gel time at 140°C</td>
<td>1.2 min</td>
</tr>
<tr>
<td>Minimum Viscosity</td>
<td>20 Pas at 112°C</td>
</tr>
<tr>
<td>Tg (DMA)</td>
<td>130°C</td>
</tr>
</tbody>
</table>

How to use HexPly® XF3+V24 Surface Film

1. Remove the HexPly® XF3+V24 surface film from the storage freezer and allow it to warm up to room temperature before unpacking to prevent condensation.
2. Place the HexPly® XF3+V24 on the surface of a mould that has been treated with release agent: the embossed side of the HexPly® XF3+V24 film should be face up whereas the grey resin side should be face down (in contact with the mould).
3. If needed, the film can be overlapped (10mm recommended) to give a continuous film over larger areas. But the number of overlaps should be kept to the minimum.
4. To improve the final result, remove air and ensure good contact with the mould we recommend covering the ply of HexPly® XF3+V24 with release film and applying a vacuum bag at room temperature for 5 minutes. Target is to keep the veil slightly dry before applying the prepreg ply.
5. Continue the lay-up with the chosen prepreg to complete the component and make up the final vacuum bag assembly for cure. Debulking step can be apply but the total (step 4 and 5) should not exceed 10 minutes at room temperature.
6. Cure the assembly in an autoclave according to the specific requirements of the prepreg. Optimum results are obtained with a heat up ramp of 2°C/min.
7. When the autoclave has cooled below 60°C, take out the mould and remove consumables along with the cured part.
Processing
Examples of co-curing cycles:
1. With HexPly® M10R or HexPly® M49 resin systems: Heat up ramp 2°C/min, 60 minutes at 120°C with 3 bars pressure
2. With HexPly® M47 resin systems: Heat up ramp 2°C/min, 90 min at 140°C with 7 bars pressure.

Properties of cured material
Surface appearance: smooth with no porosity. Primer can be used to reduce fabric print though of heavy reinforcement in order to achieve a perfect surface finish.

Environmental resistance: surface finish is maintained, especially in respect to fabric pattern print through after various aging cycles. For example, after more than one week at 40°C with 98% relative humidity.

Paint adhesion: Excellent adhesion according to EN ISO 2409.

Prepreg Storage Life
- Outlife and tack life at room temperature: 30 days
- Shelf life at -18°C :12 months

Storage
Prepreg should be stored as received in a freezer at -18°C. After removal from freezer, prepreg should be allowed to reach room temperature before opening the polyethylene bag, thus preventing condensation. (a full reel in its packing can take up to 24 hours)

Precautions for Use
The usual precautions when handling uncured synthetic resins and fine 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
- HiFlow® RTM resins
- HexForce® reinforcements
- HexBond® adhesives
- HiMax® multiaxial reinforcements
- HexTool® tooling materials
- HexPly® prepregs
- HexWeb® honeycombs
- HexAM® additive manufacturing
- Acousti-Cap® sound attenuating honeycomb
- HexMC® molding compounds
- Engineered core
- Engineered products
- Polyspeed® laminates
- Engineered core
- Polyspeed® laminates & pultruded profiles

For U.S. 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

©2022 Hexcel Corporation – All rights reserved. Hexcel Corporation and its subsidiaries (“Hexcel”) believe that the technical data and other information provided herein was materially accurate as of the date this document was issued. Hexcel reserves the right to update, revise or modify such technical data and information at any time. Any performance values provided are considered representative but do not and should not constitute a substitute for your own testing of the suitability of our products for your particular purpose. Hexcel makes no warranty or representation, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, and disclaims any liability arising out of or related to, the use of or reliance upon any of the technical data or information contained in this document.