HexPly® M98

180°C (350°F) Curing Epoxy Surfacing & Lightning Protection Film

Product Data Sheet

Description

HexPly® M98 is an epoxy surface film designed specifically for excellent surface aspect and compatibility with lightning strike protection (LSP) layer. HexPly® M98 is co-curable with a range of HexPly® Prepreg.

Benefits and Features

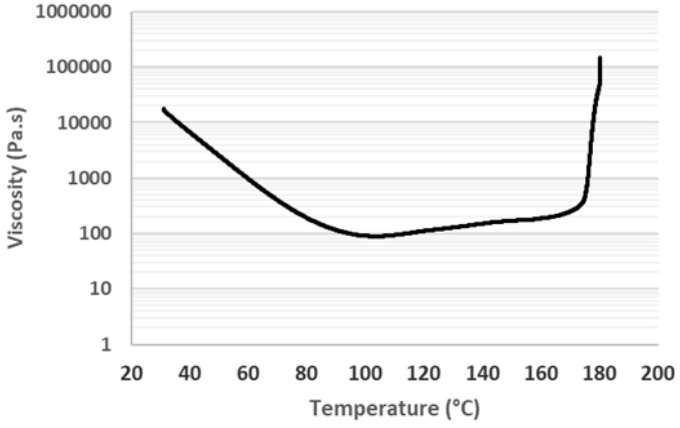
- Good surface aspect
- UV resistant
- Sanding & Painting facilitated
- Long tack & out life (30 days)
- Optimized Tg wet > 100°C
- Fully compatible with HexPly® M21 & M21E
- Available in HLU and ATL formats

Properties of Uncured Film

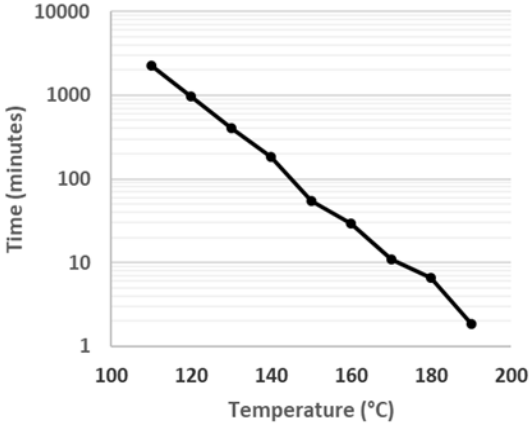
Color	Green
Density	1.46 g/cm^3
Gel time at 180°C	6 min
Minimum Viscosity (ramp 1°C/min)	90 Pa.s (≈100°C)
Tg onset (DMA) Dry	140°C
Tg loss (DMA) Dry	160°C
Tg onset (DMA) Wet	100°C
Tg loss (DMA) Wet	130°C

M98 Rheology

Dynamic viscosity 1°C/min ramp



Gel time



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HEXCEL®

Product Data Sheet

Material Presentation
Available as a surface film and with a variety of lightning strike protection layer. Low resin areal weight possible with good surface aspect.

How to use HexPly® M98 Surface Film
1. Remove the HexPly® M98 surface film from the storage freezer and allow it to warm up to room temperature before unpacking to prevent condensation.
2. Place the HexPly® M98 on the surface of a mold that has been treated with release agent: the HexPly® M98 film green side should be on the opposite side of the carbon layer to ensure a better surface finish on the outer side.
3. To improve the final result, remove air and ensure good contact with the mold/carbon stack we recommend covering the ply of HexPly® M98 with release film and applying a vacuum bag at room temperature for 5 minutes.
4. 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.
5. Cure the assembly in an autoclave according to the specific requirements of the prepreg. Optimum results are obtained with a heat up ramp below 2°C/min.
6. When the autoclave has cooled below 60°C, take out the mold and remove consumables along with the cured part

Processing
Example of co-curing cycle:
With HexPly® M21E resin system: Heat up ramp 0.7°C/min, 2 hours @180°C with 7 bars pressure.

Properties of Cured Material
Surface appearance: smooth with no porosity or pinhole.

Prepreg Storage Life
Out life and tack life: 30 days

Shelf life at -18°C: 12 months (from date of manufacturing)

Definition
Shelf Life The maximum storage life for HexPly® prepreg, upon receipt by the customer, when stored continuously, in a sealed moisture-proof bag, at -18°C (0°F). To accurately establish the exact expiry date, consult the label box.

Tack Life The time, at room temperature, during which prepreg retains enough tack for easy component lay up.

Out Life The maximum accumulated time allowed at room temperature between removal from the freezer and cure.

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 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® molding compounds
- HiFlow® RTM resins
- HexBond® adhesives
- HexTool® tooling materials
- HexWeb® honeycomb
- Acousti-Cap® sound attenuating honeycomb
- Engineered core
- Engineered products

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:

https://www.hexcel.com/contact

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