



HexPly® 913

125°C curing epoxy matrix



Product Data Sheet

Description

HexPly® 913 is a proven modified epoxy matrix with a low temperature cure cycle which exhibits outstanding environmental resistance, whilst retaining good hot/wet mechanical performance. This versatile matrix system can be processed using a wide range of techniques according to the application and is capable of co cure with epoxy film adhesives.

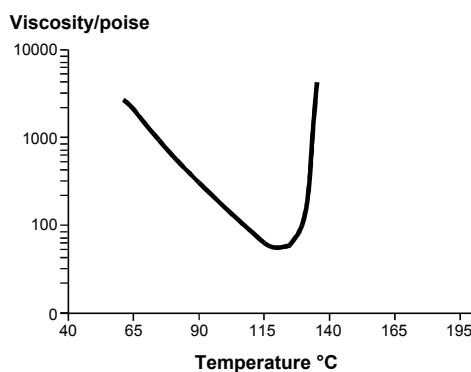
HexPly® 913 is a highly successful matrix used extensively in the aerospace industry for primary aircraft structures and helicopter blades.

Benefits and Features

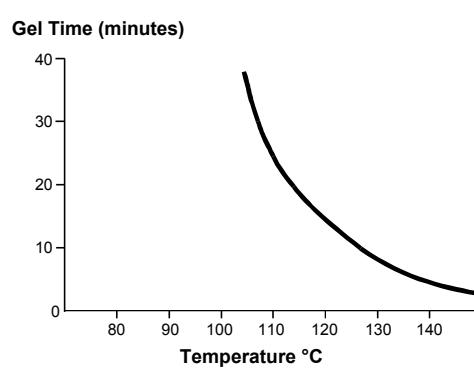
- Exceptional environmental resistance
- Controlled minimum viscosity giving easy processing
- Capable of being processed by various techniques
- Good tack and drape characteristics
- Long shelf life and out life at room temperature
- Compatible with Redux 312 adhesive film

Resin Matrix Properties

Rheology



Gel Time



Cured Matrix Properties (cured at 125°C)

Tensile strength	65.5 MPa
Tensile modulus	3.39 GPa
Cured density	1.23 g/cm ³

Method

ISO R527 type 1
ISO R527 type 1



Prepreg Curing Conditions

60 mins at 125°C and 700kN/m² (7 bar) pressure. Heat up rate 2°C to 8°C.

Alternative cure cycles:

Temperature °C	Time (Min)
140	40
150	20
160	10

Components up to 3 mm thick can be cured without a dwell in the schedule provided that the heat-up rate is not more than 5°C/minute. A dwell period is necessary in the heat-up to avoid the occurrence of a resin exotherm (usually 80 - 100°) but the dwell period will depend on the mass and type of tool.

Prepreg Storage Life

- Tack Life @ 23°C 30 days
- Guaranteed Shelf Life @ -18°C 12 months (maximum from date of manufacture)
- Storage conditions.

HexPly® 913 prepgs should be stored as received in a cool dry place or in a refrigerator. After removal from refrigerator storage, prepreg should be allowed to reach room temperature before opening the polythene bag, thus preventing condensation. (A full reel in its packaging can take up to 48 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® prepgs
- HexMC®-i molding compounds
- HexFlow® RTM resins
- HexBond™ adhesives
- HexTool® tooling materials
- HexWeb® honeycombs
- Acousti-Cap® sound attenuating honeycomb
- Engineered core
- Engineered products
- Polyspeed® laminates & pultruded profiles
- HexAM® 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>