

HexPly® 913

125°C curing epoxy matrix

Product Data

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.

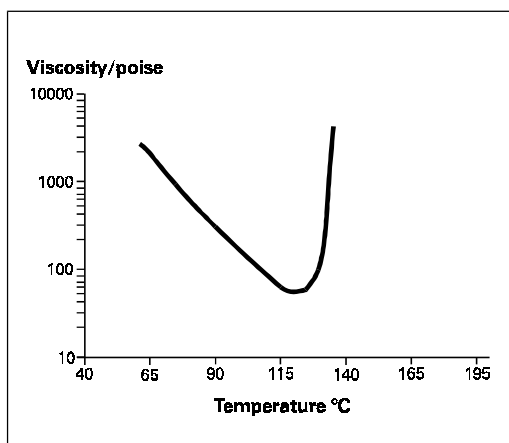
HexPly 913 is a highly successful matrix used extensively in the aerospace industry for primary aircraft structures and helicopter blades.

Benefits and Features

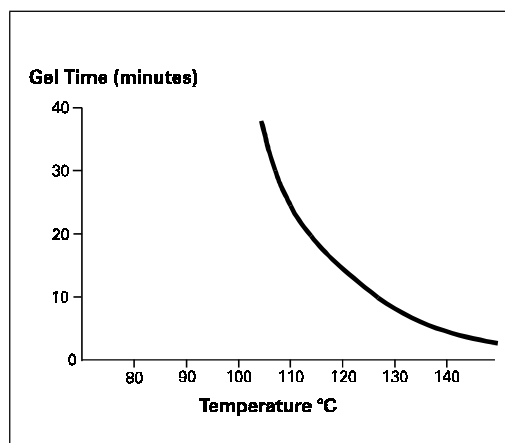
- Exceptional environmental resistance
- Controlled minimum viscosity giving easy processing
- Capable of being processed by various techniques
- Good tack and drape characteristics
- Long shelf life and out life at room temperature
- Compatible with Redux 312 and 335K adhesive films

Resin Matrix Properties

Rheology



Gel Time





HexPly® 913 Product Data

Cured Matrix Properties (cured at 125°C)

		Method
Tensile strength	65.5 MPa	ISO R527 type 1
Tensile modulus	3.39 GPa	ISO R527 type 1
Cured density	1.23 g/cm ³	

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
- Storage conditions.

HexPly 913 prepregs 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.

Important

All information is believed to be accurate but is given without acceptance of liability. Users should make their own assessment of the suitability of any product for the purposes required. All sales are made subject to our standard terms of sale which include limitations on liability and other important terms.

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Publication FTA054b (Oct 2002)

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