



HexPly® M9.1F/M9.6F

75-160°C curing epoxy matrix

Provisional Product Data

Description

HexPly® M9.1F/M9.6F is a formulated epoxy resin which is suitable for low pressure molding processes. It is very versatile and allows a range of processing temperatures from 167°F (75°C) up to 320°F (160°C). HexPly® M9.1F/M9.6F can be used for very large industrial components subjected to severe environmental conditions. HexPly® M9.1F/M9.6F has high fatigue resistance and gives a good surface finish. HexPly® M9.1F/M9.6F exhibits a very long shelf life at room temperature.

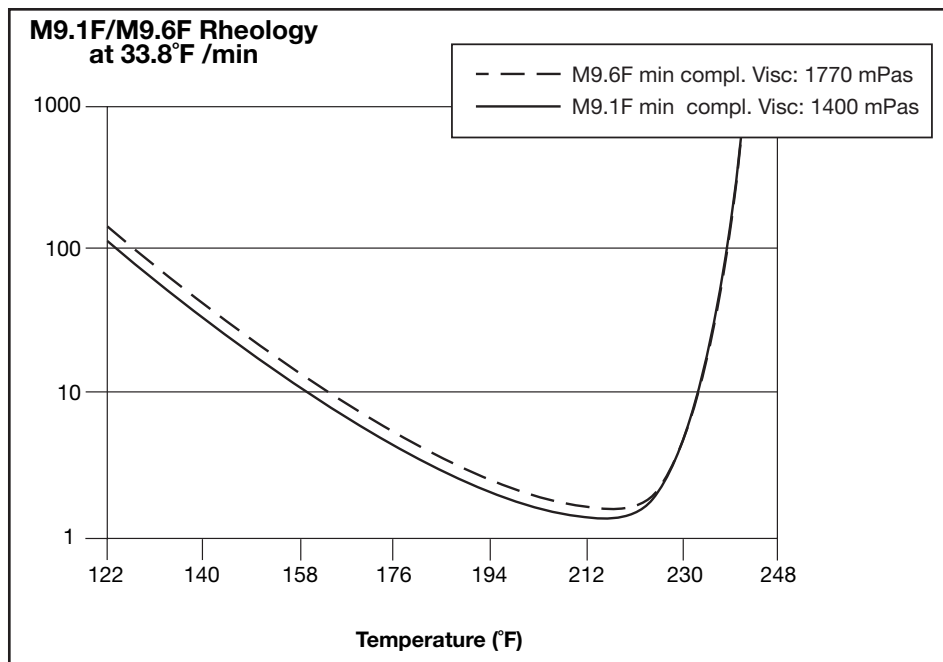
Several variations are available, including:

- M9.6F for Medium Tack
- M9.1F for Higher Tack

Benefits and Features

- Very High Flow Matrix
- Excellent Tack Life
- Well Adapted to Low Pressure Processing
- Suitable for a Range of Pressures (.03 to 5 bar)
- Versatile Cure Cycle 176-302°F (80-150°C)
- Good Flexibility and Handleability of Prepreg
- Suitable for Thick Laminates
- Good Surface Finish
- Low Resin Density
- Excellent Fatigue Resistance
- Translucent Resin After Curing

Resin Matrix Properties





Cured Matrix Properties (Cured at 120°C)

		Method
Tensile Strength	84.8 MPa	ISO R527
Tensile Modulus	3.17 GPa	ISO R527
Strain	3.75%	ISO R527
Flexural Strength	136 MPa	ISO 178
Flexural Modulus	3.17 GPa	ISO 178
Glass Transition Temperature	110-135°C	DMA
Cured Resin Density	1.20 g/cm ³	

Prepreg Curing Conditions

The ideal cure cycle is 30 min at 120°C (248°F), at a pressure between 0.3 and 5 bar. Alternative cure cycles can be used:

Temperature	Time
80°C (176°F)	8.5 hours
90°C (194°F)	203 min
100°C (212°F)	98 min
110°C (230°F)	47 min
120°C (248°F)	27 min

Heat up rate 0, -17.8 to 10°C/min (-15 to -12.2°C/min)

Prepreg Storage Life

■ Tack Life	at + 23°C (+73.4°F)	6 weeks
■ Guaranteed Shelf Life	at + 5°C (+41°F)	2 months
	at - 18°C (- 0.4°F)	12 months

Precaution 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 materials and components.

Important

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For more Information

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- Carbon Fibre
- RTM Materials
- Honeycomb Cores
- Continuous Fibre Reinforced Thermoplastics
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- Structural Film Adhesives
- Honeycomb Sandwich Panels
- Special Process Honeycombs
- Reinforced Fabrics

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 click here: <http://www.hexcel.com/contact/salesoffices>.