



HexPly® M10E

Epoxy Resin System



Product Data Sheet

Description

HexPly® M10E is an epoxy resin system preimpregnated into aramid, glass or graphite multiaxial fabrics and unidirectional fibers. HexPly® M10E prepregs are recommended for the production of low cost, large thick-sectioned industrial structures.

Features

- Flexible Cure Cycle (185° F to 300° F)
- Vacuum Bag or Autoclave Cure
- High Flow, Low Viscosity System
- Medium to High Tack
- Can be Stored at Room Temperature for 60 Days
- Optically Clear Resin

Properties

- Glass transition temperature: Dry, 241° F, Wet, 194° F
- Resin density 1.19
- Barcol Hardness 33

Availability

Form	Hexcel Designation	Fiber	Fiber Areal Wt. G/m ²	Weave	Count Warp x Fill	Available Widths Standard Widths in (cm)
Fabric PW	282	3K	197	Plain weave	12 by 12	50"
Graphite UD	AS3C-S 150-300 GSM	AS3C-S 12K	150-300			12", 24"

Physical Properties

Property	Carbon Tapes
Tensile and compressive	M10E 37% AS3C-S, 300 GSM



Mechanical Properties

Property	Temperature	Condition	Carbon Tapes
Tensile Strength	Room Temp.	Dry	293 ksi
Tensile Modulus	Room Temp.	Dry	17.6 Msi
Tensile Strain	Room Temp.	Dry	1.54%
Compression Strength	Room Temp.	Dry	154 ksi
Compression Modulus	Room Temp.	Dry	17.0 Msi
Compression Strain (calculated)	Room Temp.	Dry	0.91%

Cure Cycle

- 185° F, 14 hours
- 200° F, 120 minutes
- 250° F, 30 minutes
- 300° F, 8 minutes

Cure Procedure

Vacuum bag or autoclave cure using ramp rate of 2-5° F per minute. Recommend hold at 250° F for 30 minutes.

Storage *(maximum, from date of manufacture)*

- At 0° F, 18 months
- At 41° F, 6 months
- At 72° F, 2 months

For more information

Hexcel is a leading worldwide supplier of composite materials to aerospace and industrial markets. Our comprehensive range includes:

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|------------------------------------|--|---|
| ● HexTow® carbon fibers | ● HexFlow® RTM resins | ● Engineered core |
| ● HexForce® reinforcements | ● HexBond™ adhesives | ● Engineered products |
| ● HiMax® multiaxial reinforcements | ● HexTool® tooling materials | ● Polyspeed® laminates & pultruded profiles |
| ● HexPly® prepregs | ● HexWeb® honeycombs | ● HexAM® additive manufacturing |
| ● HexMC®-i molding compounds | ● Acousti-Cap® sound attenuating honeycomb | |

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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