



EP145 Epoxy Prepreg

EP145 is an ultra low temperature curing, high performance epoxy system. Capable of curing at 145° F, EP145 can display Tg exceeding 350° F when suitably post cured. EP145 is designed for high performance applications that require ultra low cure temperature or co-laminating with temperature sensitive materials, such as balsa wood.

Properties of EP145-7781

Tensile Strength, psi	75,000
Tensile Modulus, psi	3,800,000
Flexural Strength, psi	84,000
Flexural Modulus, psi	3,900,000
Compressive Strength, psi	60,000
Compressive Modulus, psi	3,800,000
Interlaminar Shear, psi	8,400
Tg (cured 16 hours at 145°F, post cured 4 hours at 350°F, Via TMA)	350°F +

Properties of EP145—12K 2x2 Twill Standard Modulus Carbon

Tensile Strength, psi	92,000
Tensile Modulus, psi	8,600,000
Flexural Strength, psi	85,000
Flexural Modulus, psi	8,700,000
Compressive Strength, psi	83,000
Compressive Modulus, psi	8,700,000

Properties of EP145—5.7 oz 3K PW Standard Modulus Carbon

Tensile Strength, psi	96,000
Tensile Modulus, psi	9,100,000
Flexural Strength, psi	93,000
Flexural Modulus, psi	9,200,000

NOTE: The data presented herein has been developed under controlled manufacturing and test conditions and is considered accurate. No warranty is expressed or implied regarding the accuracy or use of this data or the use of this product. It is the responsibility of the end user to determine suitability for use.



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PROCESS INFORMATION

Autoclave Cycle 1:

- Draw vacuum and apply 45-70 psi autoclave pressure
- 5°F/minute ramp to 145°F to 155°F
- Hold for 16 Hours
- Cool to less than 100°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 4 hours at 350°F

Autoclave Cycle 2:

- Draw vacuum and apply 45-70 psi autoclave pressure
- 5°F/minute ramp to 145°F (optional)
- Hold for 30 to 45 minutes (optional)
- 5°F/minute ramp to 235°F
- Hold at 235°F for 120 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 4 hours at 350°

Vacuum Bag in Oven Cycle 1:

- Draw vacuum 5°F/minute ramp to 145°F
- 5°F/minute ramp to 145°F to 155°F
- Hold for 16 Hours
- Cool to less than 100°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 4 hours at 350°F

Vacuum Bag in Oven Cycle 2:

- Draw vacuum
- 5°F/minute ramp to 145°F (optional)
- Hold for 30 to 45 minutes (optional)
- 5°F/minute ramp to 235°F
- Hold at 235°F for 120 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 4 hours at 350

Recommended Storage

- 77° F—Room Temperature

Five (5) Days

- 0° F—Freezer

Six (6) Months

NOTE: EP145 Prepreg is wound with a polyethylene film release liner for easy release. The rolls are sealed in polyethylene film bags to protect prepreg from moisture and other contaminants. The bags should remain sealed while the prepreg is under refrigeration and only removed when the prepreg has had sufficient time to warm to room temperature. When not in use, the prepreg should be returned to refrigerated storage. Care should be exercised to limit out-time of the prepreg in order to insure maximum shelf life. Torn bags should be replaced.