

**EP350
Epoxy Prepreg**

EP350 is a high temperature curing, modified epoxy. It is self extinguishing, passing the 60 Second Vertical Ignition Test listed in FAR 25.853. EP350 offers an excellent combination of toughness and high glass transition temperature. EP350 is capable of curing at temperatures as low as 275°F and is capable of a free standing post cure. EP350 displays a 300°F T_g.

Mechanical Properties of EP350 7781

Room Temperature Testing

Tensile Strength, psi	79,000
Tensile Modulus, psi	4,000,000
Flexural Strength, psi	105,000
Flexural Modulus, psi	3,900,000
Compressive Strength, psi	72,000
Compressive Modulus, psi	3,600,000
In Plane Shear Strength, psi	15,900
In Plane Shear Strength, psi (at 185°F, 87% relative humidity, saturation at 1.1% moisture pick up)	8,900
T _g via DMA, Tan Delta	356°F

Room Temperature Testing following a 24 hour Water Boil

Tensile Strength, psi	69,000
Tensile Modulus, psi	4,000,000
Flexural Strength, psi	97,000
Flexural Modulus, psi	3,750,000
Compressive Strength, psi	72,000
Compressive Modulus, psi	4,400,000

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Exposed to ½ Hour at 160°F and Tested at 160°F:

Tensile Strength, psi	53,000
Tensile Modulus, psi	4,300,000
Flexural Strength, psi	76,000
Flexural Modulus, psi	3,600,000
Compressive Strength, psi	61,000
Compressive Modulus, psi	4,100,000
Interlaminar Shear Strength, psi	6,400

Properties of EP350 6.2 oz, 2 x 2 Twill Carbon

Tensile Strength, psi	85,000
Tensile Modulus, psi	9,200,000
Flexural Strength, psi	102,000
Flexural Modulus, psi	8,800,000
Compressive Strength, psi	90,000
Compressive Modulus, psi	9,000,000
Interlaminar Shear Strength, psi	10,800

Process Information

Vacuum Bag in Autoclave

- Draw Vacuum and apply 45 to 70 psi autoclave pressure
- 5°F/Minute Ramp to 240°F (Optional)
- Hold at 240°F for 30 to 45 Minutes (Optional)
- 5°F/Minute Ramp to 345°F to 355°F
- Hold at 345°F to 350°F for 120 Minutes
- Cool to Less than 150°F at 3 to 5°F/Minute
- Release Pressure/Vacuum and demold

Vacuum Bag in Oven

- Draw Vacuum
- 5°F/Minute Ramp to 240°F (Part Temperature)
- Hold at 240°F for 30 to 45 Minutes
- 5°F/Minute Ramp to 345°F to 355°F (Part Temperature)
- Hold at 345°F to 355°F for 120 Minutes
- Cool to Less Than 150°F at 3 to 5°F/Minute
- Release Pressure/Vacuum and demold

Press Molding

- 350°F for 120 Minutes at 50 to 70 psi

Note: Temperatures are verified via implanted thermocouple

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Recommended Storage

Room Temperature (77°F)	3 weeks
40°F	6 months
0°F	12 months

NOTE: EP350 Prepreg is wound with a polyethylene film 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. 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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