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EP385 Epoxy Prepreg

EP385 is a 350°F curing, epoxy system suitable for use in areas requiring extremely high temperature performance. Designed for use in aerospace, transportation, propulsion, and tooling applications. EP385 is a stable system and has very good tack and out time stability. EP385 displays a glass transition temperature of 385°F.

Properties of EP385-7781

Tensile Strength, psi	78,000
Tensile Modulus, psi	4,200,000
Flexural Strength, psi	88,000
Flexural Modulus, psi	4,200,000
Compressive Strength, psi	62,000
Compressive Modulus, psi	3,800,000
Interlaminar Shear Strength, psi	8,200
Tg (cured 3 hours at 400° F)	385° F

Properties of EP385-12K 2 x 2 Twill Std. Modulus Carbon

Tensile Strength, psi	90,000
Tensile Modulus, psi	8,500,000
Flexural Strength, psi	88,000
Flexural Modulus, psi	8,800,000
Compressive Strength, psi	85,000
Compressive Modulus, psi	8,900,000
Interlaminar Shear Strength, psi	9,000
Tg (cured 3 hours at 400° F)	385° F

Properties of EP385-5.7 oz 3K PW Standard Modulus Carbon

Tensile Strength, psi	98,000
Tensile Modulus, psi	9,000,000
Flexural Strength, psi	92,000
Flexural Modulus, psi	9,300,000
Tg (cured 3 hours at 400° F)	385° F

NOTE: EP385 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. 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.
Rev. Date: 6/07



Process Information - EP385

Autoclave Cycle 1:

- Draw vacuum and apply 45-70 psi autoclave pressure
- 5°F/minute ramp to 200°F (optional)
- Hold for 30 to 45 minutes (optional)
- 5°F/minute ramp to 345°F to 355°F
- Hold at 345°F to 355°F for 120 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 3 hours at 400°F

Vacuum Bag in Oven Cycle 1:

- Draw vacuum
- 5°F/minute ramp to 200°F
- Hold for 30 to 45 minutes
- 5°F/minute ramp to 345°F to 355°F
- Hold at 345°F to 355°F for 120 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold
- Post cure 3 hours at 400°F

Autoclave Cycle 2:

- Draw vacuum and apply 45-70 psi autoclave pressure
- 5°F/minute ramp to 200°F (optional)
- Hold for 30 to 45 minutes (optional)
- 5°F/minute ramp to 400°F
- Hold at 395°F to 405°F for 180 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold

Vacuum Bag in Oven Cycle 2:

- Draw vacuum
- 5°F/minute ramp to 200°F
- Hold for 30 to 45 minutes
- 5°F/minute ramp to 395°F to 405°F
- Hold at 395°F to 405°F for 180 minutes
- Cool to less than 180°F at 3 to 5°F/minute
- Release pressure/vacuum and demold

Recommended Storage

- | | |
|------------------------------|----------------------|
| - Room Temperature (77° F) | Two (2) Weeks |
| - 40° F | Six (6) Months |
| - 0° F | Twelve (12) Months |

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