



EP428 Epoxy Prepreg

EP428 is a 365° F curing, epoxy system suitable for use in areas requiring extremely high temperature performance and fire resistance. EP428 displays a glass transition temperature of 410° F.

Properties of EP428-5.7 oz 3K PW Standard Modulus Carbon

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|----------------------------------|-----------|
| Flexural Strength, psi | 106,000 |
| Flexural Modulus, psi | 7,400,000 |
| Tensile Strength, psi | 80,000 |
| Tensile Modulus, psi | 9,700,000 |
| Interlaminar Shear Strength, psi | 7,100 |
| UL94V-0 | Pass |
| Tg (via TMA, Thermal Expansion) | 428° F |

Process Information—EP428

Autoclave Cycle:

Draw vacuum and apply 85-100 psi autoclave pressure
5° F/minute ramp to 240° F (optional)
Hold for 30 to 45 minutes (optional)
5° F/minute ramp to 365° F
Hold at 365° F for 70 minutes
Cool to less than 180° F at 3 to 5° F/minute
Release pressure/vacuum and demold

Press Cycle:

Apply 100 psi minimum pressure
5° F/minute ramp to 365° F
Hold for 70 minutes
5° F/minute ramp to 365° F
Cool to less than 180° F at 3 to 5° F/minute
Release pressure and demold

Post Cure:

5° F/minute ramp to 450° F
Hold for 120 minutes
Cool to less than 160° F at 3 to 5° F/minute

Recommended Storage

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|----------------------------|----------------|
| - Room Temperature (77° F) | Four (4) Weeks |
| - 0° F | Six (6) Months |

NOTE: EP450 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

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.