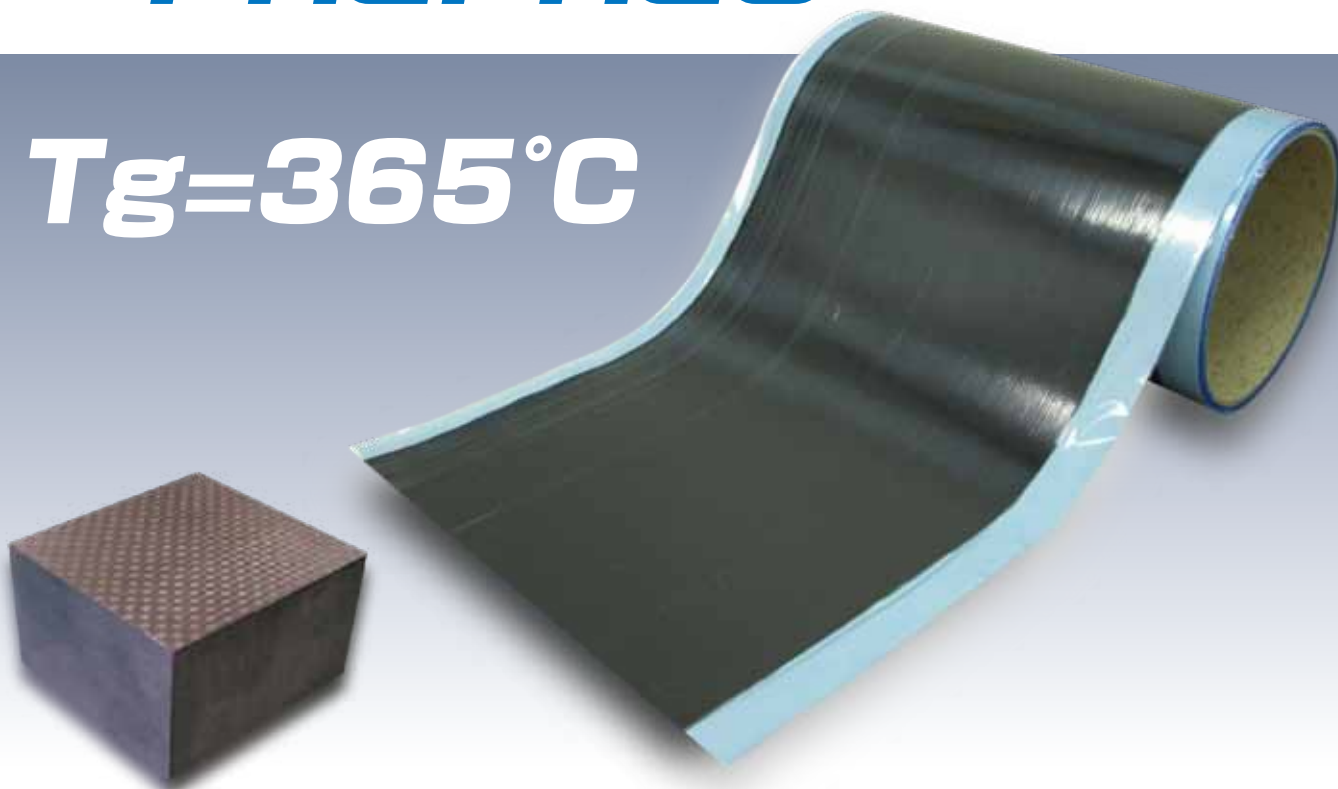




Prepreg for High Temp. Composite

PETI-365A PREPREG

$T_g=365^{\circ}\text{C}$



Features and benefits

- Polyimide resin matrix based on exclusive monomer technology developed by UBE.
- Exceptional high heat resistance.
- Complete elimination of MDA.
- Cured resin with high toughness and extremely low micro cracking characteristic.
- Maximum cure temperature at 370°C.
- Excellent high temperature oxidation resistance.

Typical prepreg specification

- Resin content (Rc): Approx. 35wt%
- Volatile content (Vc): Approx. 21wt%
- Solvent: N-methylpyrrolidone

Typical properties of resin

- Glass transition temperature (T_g): $>350^{\circ}\text{C}$

Example of composite properties

- Compression After Impact Strength: 282 MPa/40927psi @Impact energy 30J (270 in lbs) SACMA SRM 2R-94
- Interlaminar Fracture Toughness Mode I (G_{Ic}): 305 J/m² (1.74 in lbs/in²)@22°C ASTM D5528
- Interlaminar Fracture Toughness Mode II (G_{IIc}): 1700 J/m² (9.70 in lbs/in²)@22°C ASTM D5528
- Carbon fiber: Tenax IMS60-12k

Application

- High temperature components for jet engines.
- Structural parts for aircrafts and launch vehicles.
- Other high heat resistance parts and structures.

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