

## PMT-F33

### Description:

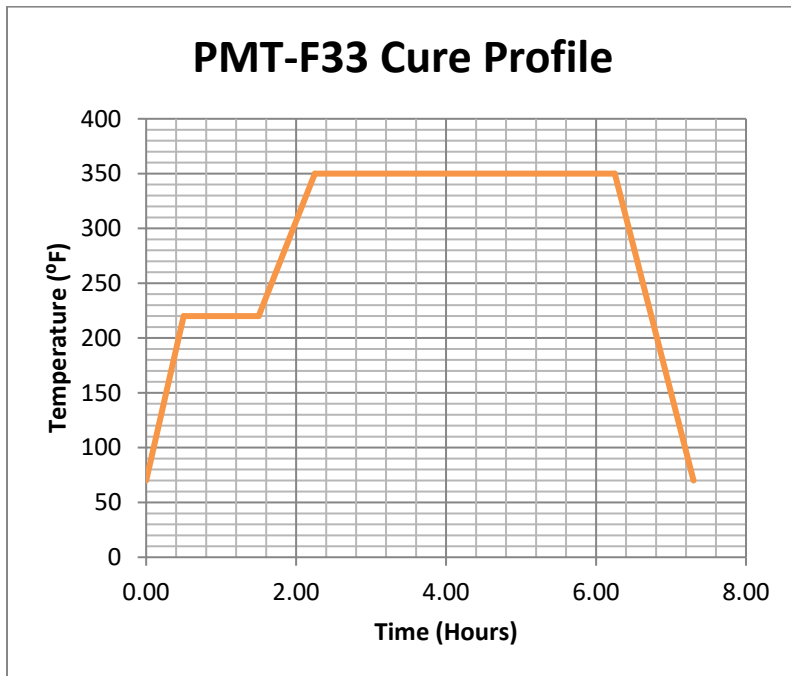
PMT-F33 is a toughened cyanate ester resin system designed for vacuum bag, press and autoclave curing with standard layup procedures. The resin can be impregnated into numerous reinforcements and imparts a medium/dry tack.

### Features:

- Low Water Uptake (< 1.2%)
- Low Melt Viscosity (7000 CPS at 175°F)
- Density of 1.19 g/cm<sup>3</sup>
- Low Dielectric Constant (Dk/Df= 2.75/0.003 @ 3 GHz)
- High Tg (485°F)
- Thermal Conductivity: 0.6 W/m<sup>2</sup>K

Out-Gassing		Test
Average Results (n=6)		
TML	<b>0.21%</b>	<b>ASTME595</b>
VCM	<b>0.01%</b>	<b>ASTME595</b>

### Recommended Cure profile:



- Stage 1 – Ramp 5°F/min to 220°F under vacuum bag pressure.
- Stage 2 – Switch to 80 psi autoclave pressure then dwell 220°F for 0.5 hours
- Stage 3 – Ramp 5°F/ min to 350°F
- Stage 4 – Dwell at 350°F for 4 hours
- Stage 5 – Ramp 5°F/ min to RT and remove pressure

\*PMT-F33 can be post cured, free standing, at higher temperatures to obtain an increased Tg.

**Storage:**

PMT-F33 should be stored in a desiccated sealed bag. PMT-F33 has a storage life of 1 year when stored under 10°F and a handling life of 30 days when stored at 75°F.

**Laminate Data:**

PMT-F33/M55J UDP @ 60% FV	ASTM Test Method	Value
0° Tensile Strength, ksi	D3039	310
0° Tensile Modulus, Msi	D3039	48.5
90° Tensile Strength, ksi	D3039	4.8
90° Tensile Modulus, Msi	D3039	1.3
0° Compression Strength, ksi	D6641	128
0° Compression Modulus, Msi	D6641	46.3
0° Flexural Strength, ksi	D7364	182
0° Flexural Modulus, Msi	D7364	44.1
Short Beam Shear Strength, ksi	D2344	11.2
Tg, Cure , °F minimum	D7028	375
Tg, Post Cure, °F minimum	D7028	485

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