



# PMT-F4

### Description

The PMT-F4 resin is a highly toughened epoxy system designed for vacuum bag, press and autoclave curing using standard layup procedures. The resin system is utilized by UAV's, commercial sporting goods, automotive racing, and many other composite industries due to the improved performance at competitive pricing. The resins can be impregnated into numerous unidirectional or fabric reinforcements.

### Resin Properties

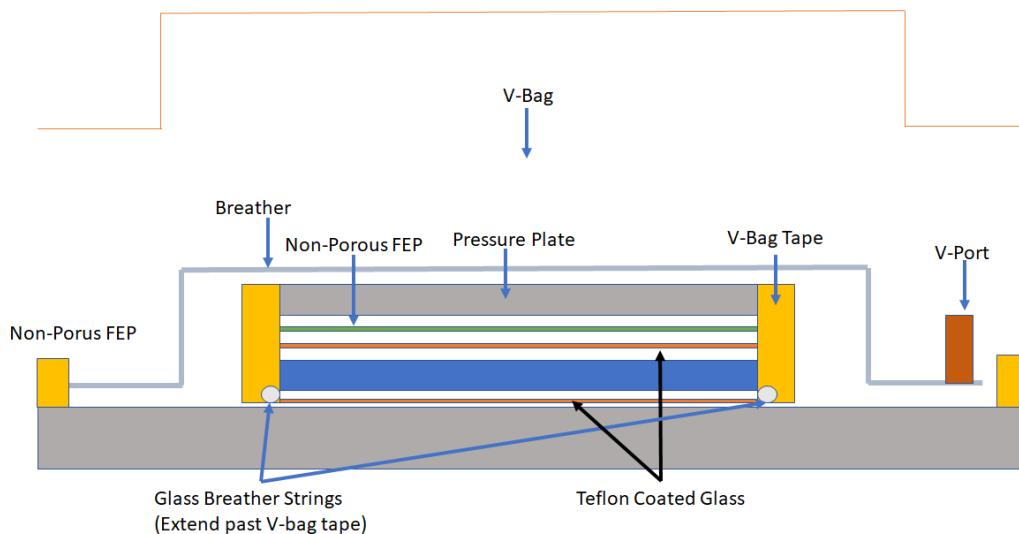
Property	Value
Density	1.21 g/cm <sup>3</sup>
Gel at 250F	5-9 min
TG with 250F cure	300F
TG with 350F post cure	345F

### Storage

PMT-F4 should be stored in a desiccated sealed bag. PMT-F4 has a storage life of 2 years when stored at 10°F and a handling life of 3 months when stored at 70°F or below.

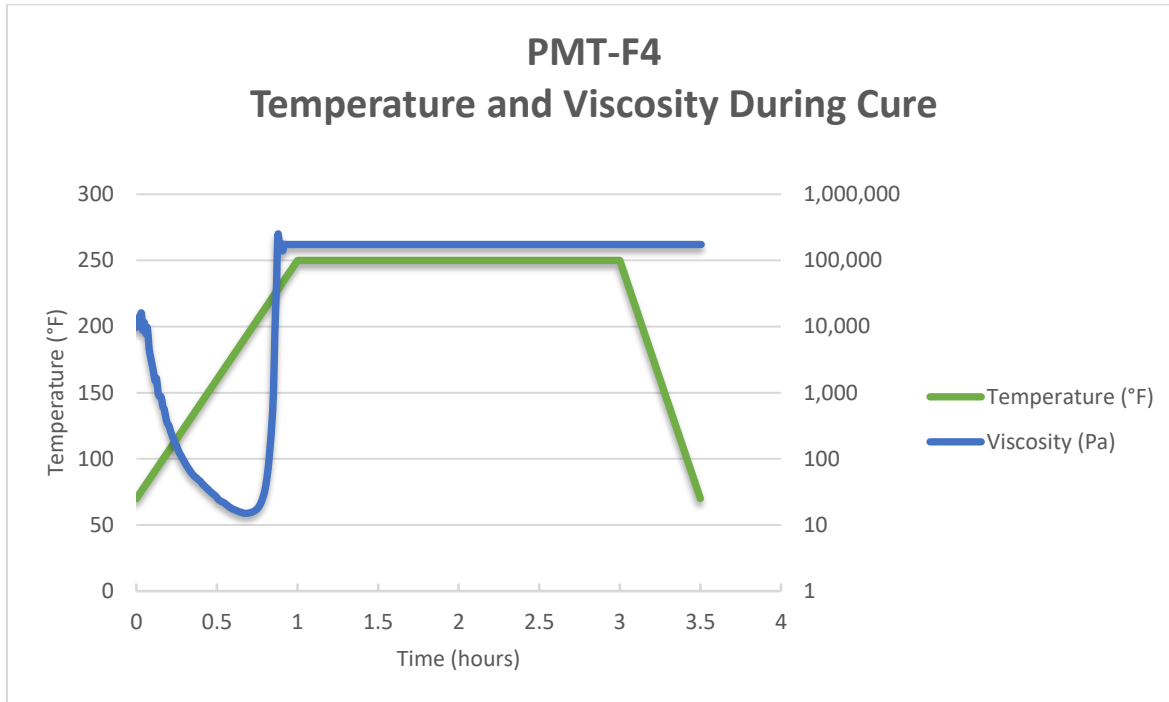
### Recommended Bagging Procedure

PMT-F4 requires heat and pressure for consolidation. There are many different layup and cure procedures that will yield successful structures. As a base line PMT recommends using the following bagging sequence





### Cure Cycle



- Stage 1 – Ramp 5°F/min to 250°F under pressure
- Stage 2 – Dwell at 250°F for 2 hours
- Stage 3 – Ramp 5°F/ min to RT and remove pressure
- Optional Free standing Post Cure**
- Stage 4 – Ramp 5°F/min to 350 °F
- Stage 5 – Dwell at 350°F for 2 hours
- Stage 6 – Ramp 5°F/ min to RT

### PMT-F4 Laminate Mechanical Properties

Property*	ASTM Test Method	284 (3K 2x2) Fabric	7781 Glass Fabric	T700 12K UDP	HM63 UDP
0° Tensile Strength, Ksi	D3039	115.5	76.0	321.4	352.1
0° Tensile Modulus, Msi	D3039	8.8	3.9	21.1	33.8
0° Compression Strength, Ksi	D6641	97.2	68.9	241.8	205.2
0° Compression Modulus, Msi	D6641	9.3	3.7	20.5	31.1