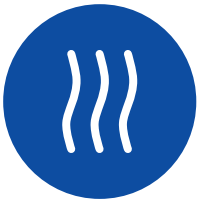




Toray Composite Materials America, Inc.

## G-94M PREPREG SYSTEM

G-94M is our standard 250°F to 300°F cure system. It can be used for multiple purposes but is found primarily in recreational and sporting goods applications. It provides excellent mechanical properties, controlled flow, great handling, and a high  $T_g$ .



### High Heat Tolerance

High  $T_g$  allows for high temperature part demolding reducing cycle time. Material works well with high temperature paint curing cycles.



### Easy Layup

Product allows complex part layup with minimal cuts or ridge lines. It maintains a comparable class A finish through post-cure, minimizing sanding and finishing times.



### Readily Available

Product is in stock and ready to ship.



### Flexible Cure Methods

Cutting methods include autoclave, oven cure, or press molding. Product can be cured with or without using a dwell.

### Availability:

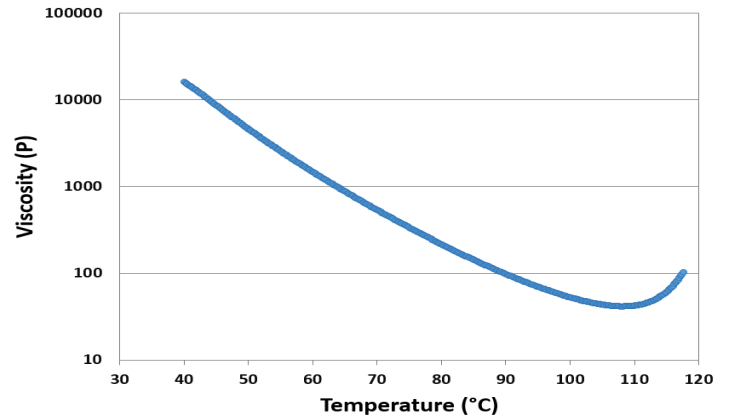
G-94M resin is available with numerous types of unidirectional carbon fibers and woven and glass fabrics with Fiber Areal Weight (FAW) ranging from 50 g/m<sup>2</sup> to 300 g/m<sup>2</sup> and Resin Content, (RC%) by weight percent, ranging from 24% to 44%.



### NEAT RESIN PHYSICAL PROPERTIES

PROPERTY	METHOD	UNITS	VALUE
Density	ASTM D595	g/cm <sup>3</sup>	1.206
Tg (Dry)	DMA	°F (°C)	270 (132)
Gel Time	ASTM D3532	minutes	3.6
Linear CTE	TMA	(μm/(m*°C))	73.9

### RESIN VISCOSITY CURVE



### NEAT RESIN MECHANICAL PROPERTIES

PROPERTY	SYMBOL	METHOD	UNITS	VALUE
Compressive Strength	F <sub>c</sub>	ASTM D695	Ksi (Mpa)	17.2 (119)
Compressive Modulus	E <sub>c</sub>	ASTM D695	Ksi (Mpa)	455 (3140)
Flexural Modulus	E <sub>f</sub>	ASTM D790	Ksi (Mpa)	494 (3410)
Flexural Strength	F <sub>f</sub>	ASTM D790	Ksi (Mpa)	21.4 (148)
Fracture Toughness	K <sub>1c</sub>	ASTM D5045-99	Psi*√in (MPa*√m)	.90 (.99)

**For more information or purchasing inquiries:**  
[sales@toraycma.com](mailto:sales@toraycma.com) | [www.toraycma.com](http://www.toraycma.com) | 253-846-1777

### TYPICAL LAMINATE PROPERTIES WITH T700S-12K at 150 g/m<sup>2</sup> FAW and 35% RC

PROPERTY	SYMBOL	METHOD	UNITS	VALUE
0° Tensile Strength*	F <sub>1t</sub>	ASTM D3039	Ksi (MPa)	407 (2810)
90° Tensile Strength	F <sub>2t</sub>	ASTM D3039	Ksi (MPa)	7.7 (53)
0° Tensile Modulus*	E <sub>1t</sub>	ASTM D3039	Msi (GPa)	19.4 (134)
±45° In Plane Shear Strength	F <sub>12</sub>	ASTM D3518	Ksi (MPa)	19.1 (132)
Inter-laminar Shear Strength	ILSS	ASTM D2344	Ksi (MPa)	11.0 (75.8)

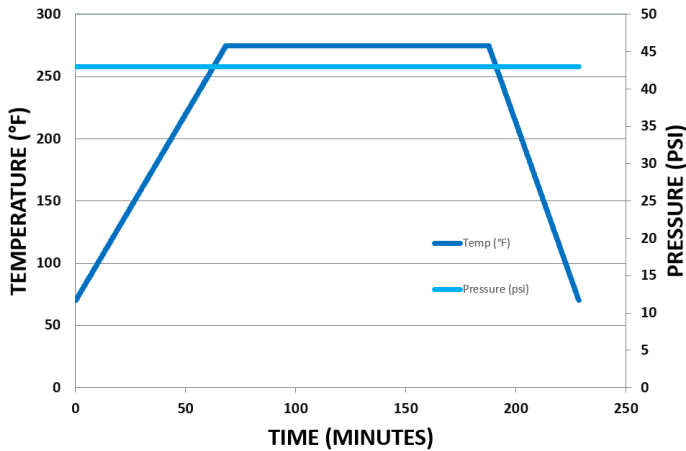
\*normalized to 60% Vf

### TYPICAL LAMINATE PROPERTIES WITH T800S-12K at 120 g/m<sup>2</sup> FAW and 34% RC

PROPERTY	SYMBOL	METHOD	UNITS	VALUE
0° Tensile Strength*	F <sub>1t</sub>	ASTM D3039	Ksi (MPa)	472 (3260)
90° Tensile Strength	F <sub>2t</sub>	ASTM D3039	Ksi (MPa)	8.6 (59)
0° Tensile Modulus*	E <sub>1t</sub>	ASTM D3039	Msi (GPa)	23.7 (163)
±45° In Plane Shear Strength	F <sub>12</sub>	ASTM D3518	Ksi (MPa)	20.0 (138)
Inter-laminar Shear Strength	ILSS	ASTM D2344	Ksi (MPa)	12.2 (84.1)

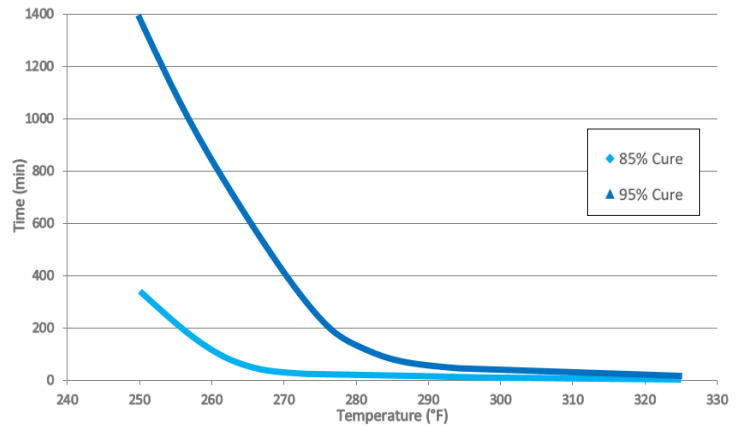
\*normalized to 60% Vf

### RECOMMENDED CURE CYCLE (275°F)



Cure Temperature: 275°F  
 Cure Time: 120 min  
 Ramp Rate: 3°F/min  
 Cure Pressure: 43 psi  
 Cool Down Rate: 5°F/min

### TIME TO 85% & 95% CURE BY CURE TEMPERATURE



### STORAGE LIFE

Fridge Life:	3 months @ <40°F
Freezer Life:	24 months @ <10°F

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