

G-94M Data Sheet

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.

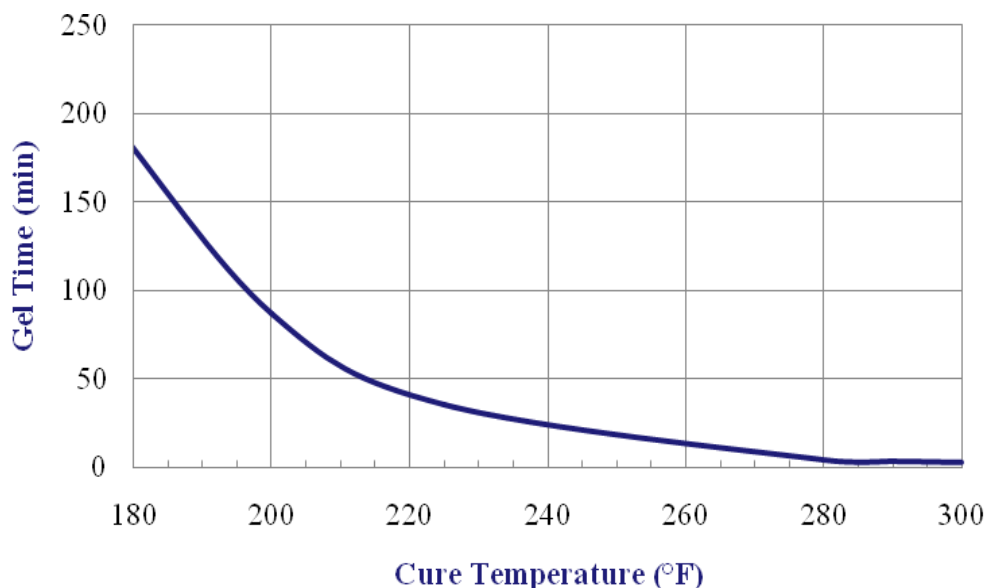
Typical Curing Times

Cure Temperature (°F)	Gel Time (Minutes)	90% Cure Time (Minutes)	95% Cure Time (Minutes)	99% Cure Time (Minutes)
200	87	156	172	260
250	13	77	85	173
280	4	66	75	92
300	3	32	39	49

Neat Resin Mechanical Data

Property	Value	Test Method
Compression	Strength (ksi)	17.2
	Modulus (ksi)	455
	Offset Yield (ksi)	14.7
K _{IC}	(psi*√in)	0.90
Flexure	Strength (ksi)	21.4
	Modulus (ksi)	494
	Offset Yield (ksi)	14.7
	Strain (%)	6.6

Gel Time Curve Profile



Toray Composites of America, Inc. Proprietary

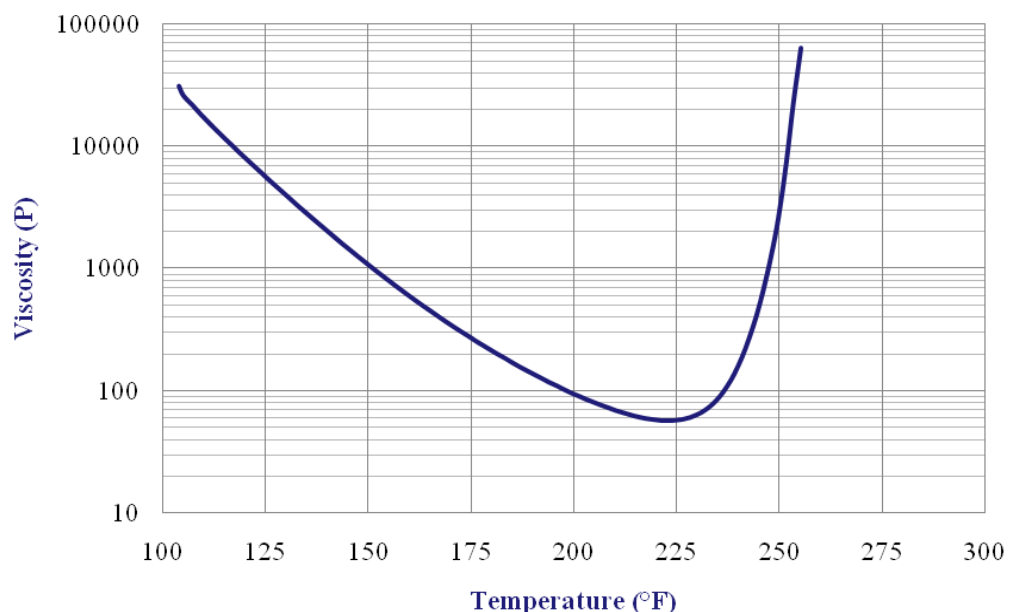
The data listed herein are lot averages and for reference purposes only. The results are not intended for specification purposes. These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Prepreg Storage Expectancy

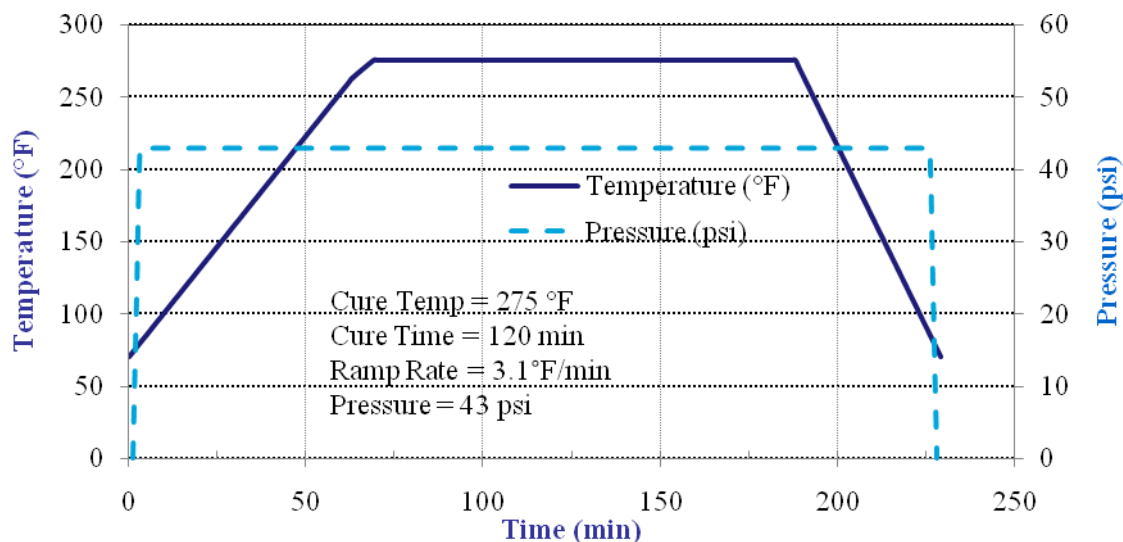
The prepreg material has at least the life expectancy listed below when stored in the following locations:

Storage Condition	Time From Date of Manufacture in Sealed Container
At or below 10°F	24 months
At or below 40°F	3 months
At or below room temperature (72 ± 5°F and 50 ± 15% humidity)	28 days

Viscosity Profile



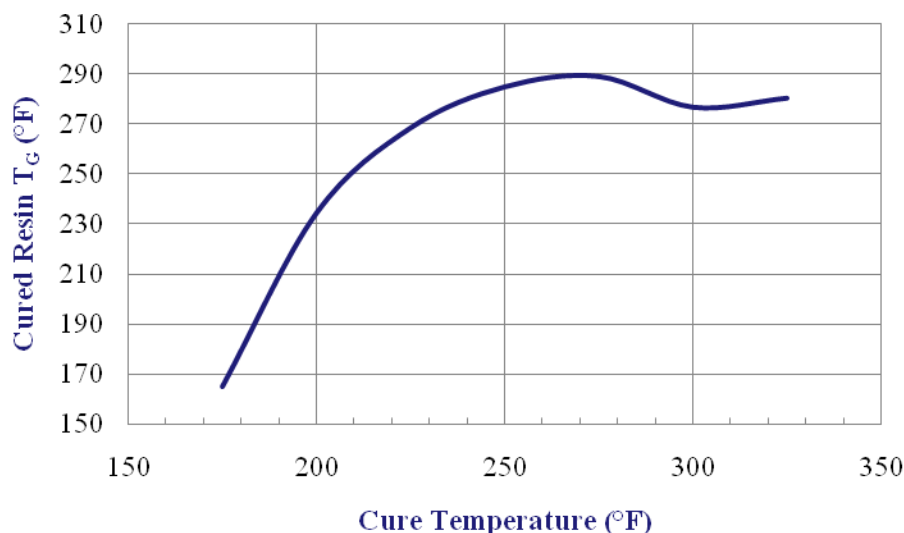
Sample Cure Cycle (275°F cure)



Toray Composites of America, Inc. Proprietary

The data listed herein are lot averages and for reference purposes only. The results are not intended for specification purposes. These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Glass Transition Temperature (T_g) Dependency on Cure Temperature



Availability

G-94M resin is available with numerous types of unidirectional carbon fibers and woven carbon and glass fabrics with Fiber Areal Weights (FAW) ranging from 50 g/m² to 300 g/m² and Resin Contents, (RC %) by weight percent, ranging from 24% to 44%.

Typical Laminate Properties

Property		T700S-12K at 150g/m ² with 35%wt.	T800S-24K at 120g/m ² with 34%wt.	Test Method
0° Tension*	Strength (ksi)	407	472	ASTM D 3039
	Modulus (msi)	19.4	23.7	
	Strain (%)	2.0	1.9	
90° Tension	Strength (ksi)	7.7	8.6	
0° Compression*	Strength (ksi)	229	214	SACMA SRM 1
0° 3-pt Flexure*	Strength (ksi)	205	220	ASTM D
	Modulus (msi)	17.1	20.6	790
± 45° In-Plane Shear Strength	Strength (ksi)	19.1	20.0	ASTM D 3518
Inter-laminar Shear Strength	Strength (ksi)	11.0	12.2	ASTM D 2344

*Normalized to 60% V_F

Data obtained from using cure cycle listed above

Toray Composites of America, Inc. Proprietary

The data listed herein are lot averages and for reference purposes only. The results are not intended for specification purposes. These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.