



COMPOSITE TECHNOLOGY DEVELOPMENT, INC.

# Technical Data Sheet

## CTD-540 Epoxy Resin System

### A New Addition to the CTD "Super-Tuff" 500 Series

CTD-540 is a new resin system in the 500 Series for applications where faster processing cycles are required without compromising the mechanical performance of the material. It can be used as a wet-winding or wet lay-up resin system. CTD-540 has a working time of 45-60 minutes at room temperature in one quart quantities, and cures sufficiently in approximately two hours to permit movement of parts for continued fabrication.

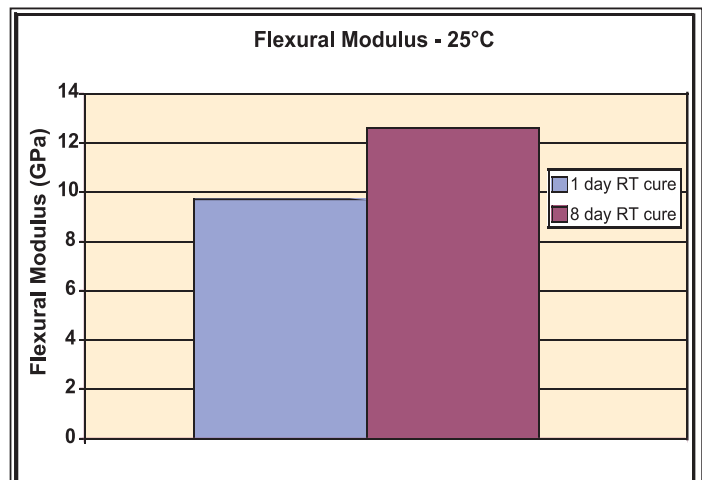
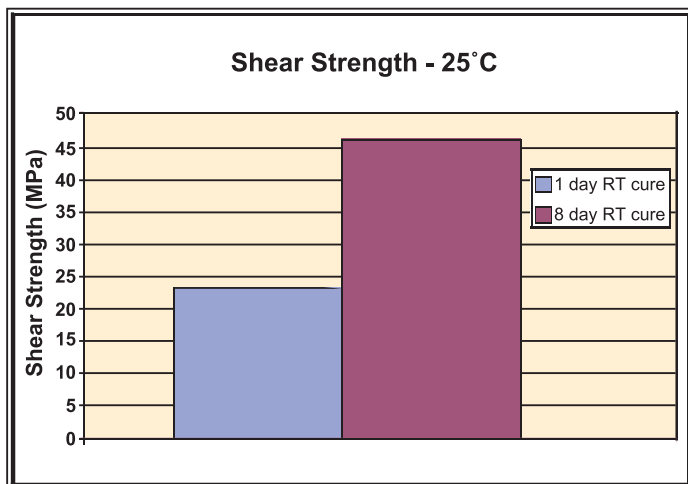
#### Key Features:

- A quick curing cryogenic epoxy system
- Improved initial viscosity
- Sufficient strength to allow for movement of the part after a 24 hour room temperature cure
- Non-carcinogenic
- Low toxicity

#### Shear Properties

NOTE: This was a hand lay-up type of laminate, resulting in a fairly low 38%  $V_f$  laminate with a thickness of 0.16"

Resin System	Shear Strength (MPa)	Std. Dev.	Cv	Flexural Mod. (GPa)	Std. Dev.	Cv
CTD-540 (24H CURE)	23.5	1.9	0.08	9.7	0.6	0.06
CTD-540 (8 DAY CURE)	45.9	0.7	0.01	12.6	0.1	0.01

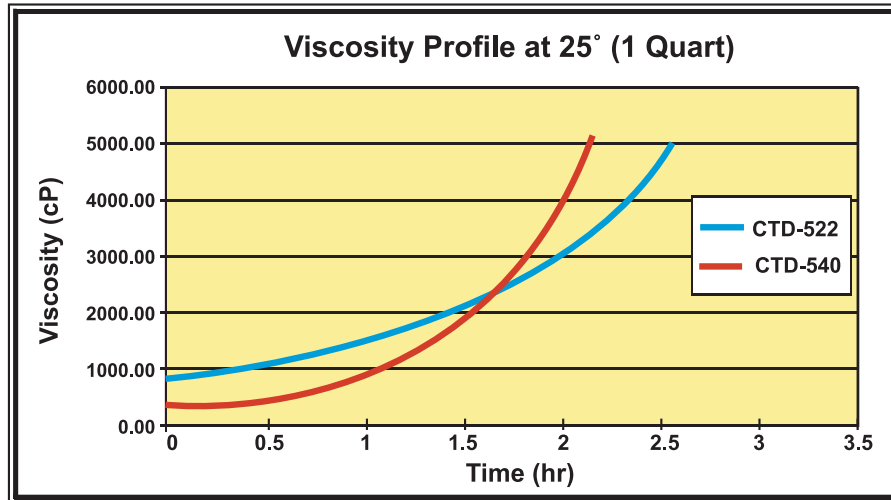




**Applications:**

- RESW Transfer Molding (RTM)
- Vacuum Pressure Impregnation (VPI)
- Filament Winding
- Wet Lay-up

**Processing Information:**



*Disclaimer: The information and recommendations contained herein are based upon data believed to be accurate. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.*