

eXpress cure Epoxy Prepreg System

RP570

Snap Cure resin system 4 minute cure at 140°C

Applications

- Automotive
- Motorsport
- Marine
- Defence

Processing Methods

- Pressing
- Autoclave

TDS0009





Description

RP570 Snap Cure prepreg system is a high performance formulated epoxy resin system with rapid Tg development enabling extremely short process times and excellent aesthetic finish. A press tool held at constant temperature of 140°C can produce a part every 4 minutes ready for painting. RP570 can be supplied on a variety of woven fabrics.

Key Features & Benefits

- Fully cured and demouldable in 4 minutes at 140°C
- Tg >140°C
- Excellent surface finish
- No thermal cycling of tools required
- Fast Tg development
- Can be preformed

Cure Cycle

Heated press:

Carefully place prepreg preforms in 140°C preheated hot tool. Close tool under 10 bar pressure and maintain 140°C temperature. Release pressure after 4 minutes and remove cured part.

Autoclave:

Full Vacuum

Dwell Time: 40 minutes

Dwell Temperature: 140°C

Temperature Ramp: 3-4°C/min

Pressure Ramp: 1 bar/min

Pressure: 2 Bar

Cooling: None or Natural Cooling

Autoclave cycle is dependent on mould, thickness, part size, etc as the heat transfer is significantly less than the heated press. Please contact enquiries@prfcomposites.com or talk to your Sales contact if you have any technical queries on using this material in your application.

Storage Conditions

- 2 years at -18°C
- 1 years at 5°C
- 60 days at 20°C

Note:

Health and Safety: Refer to the full Material Safety Datasheet before use.



Mechanical Properties

Mechanical Properties are based on 140°C, at 10 bar pressure.

Product: C0462/T300B/1250

Fibre	Carbon	
Fabric Weave Style	Twill 2/2	
Fibre type	T300B	
Fabric weight (g/m²)	245	
Resin content (%)	42	
DMA Tg by E' Onset (°C)	116.3	
DMA Tg by Tanδ Peak (°C)	144	
Tensile Strength (MPa)	ISO 527-1	684
Tensile Modulus (GPa)		73.8
Interlaminar shear strength (ILSS) (MPa)	ISO 14130	75.8
Flexural Strength (MPa)	ISO 14125	989
Flexural Modulus (Gpa)		59

All values are nominal.

Find out what PRF can do for your business

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Important Notice

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