

PRODUCT DATA SHEET

DESCRIPTION

Toray PMC CFRT® (AG-18 2L) is a reinforced thermoplastic composite laminate. It blends the benefits of a thermoplastic polymer matrix with woven glass fibers in a plain weave for enhanced performance. The AG-18 2L style laminate is available in a dual-layer product with glass fibers in both directions (0° & 90°). This construction is ultra-thin, lightweight, and resilient for improved energy return.

FEATURES

- › Plain weave of glass fibers
- › Bi-directional glass reinforcement
- › Lightest weight, thin, multiple layers
- › Available in various colors



PRODUCT TYPE AND COMPOSITION

Glass (330) fiber content: 55%
Modified PMMA thermoplastic resin: 45%
(Noted: Percentages are by volume and are nominal values)

TYPICAL APPLICATIONS

- › Footwear
- › Recreational equipment
- › Skates

SHELF LIFE

Stable indefinitely at 25°C (77°F)

Materials must be dried prior to heating and thermoforming.
Please refer to the TPMC Processing Instructions.

MATERIAL PARAMETERS

Specific Gravity	1.65 ± 0.15 (Calculated based upon material volume)
Thickness	0.95 mm (± 0.2 mm)
Standard Colors	Silver, Charcoal, and Black
Size	Cut to customer specifications from sheet of 91 x 122 cm (36 x 48 inches)
Forming Temperature	195°C to 200°C (383°F–392°F)
Bonding Temperature	55°C to 60°C (131°F–140°F)

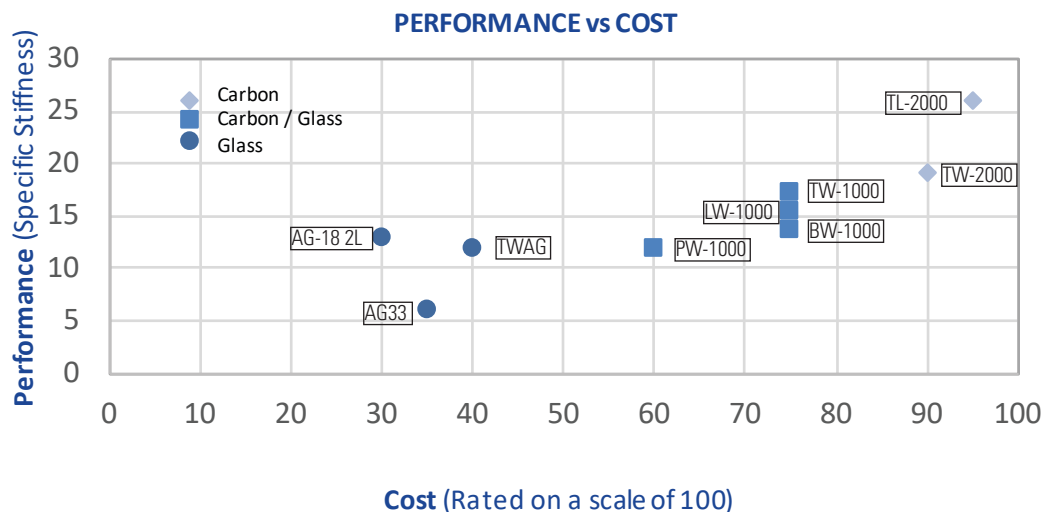


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MECHANICAL PROPERTIES

Properties	Method	Results: 4 tow per inch	Results: 5 tow per inch
Flexural Rigidity	ASTM D790-10	5.5 N-cm ² *	6.5 N-cm ² *
Flexural Strength	ASTM D790-10	470 MPa*	604 MPa*
Flexural Modulus	ASTM D790-10	13000 MPa*	16000 MPa*
T _g	ASTM D3418-15	110°C	110°C

*Performance results are based on 0.90 mm material thickness. Results will vary depending upon material thickness.

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