Toray CFRT® SP 2.3

TORAY

Toray Performance Materials Corporation

PRODUCT DATA SHEET

DESCRIPTION

Toray PMC CFRT® (SP 2.3) is a reinforced thermoplastic composite laminate. It blends the benefits of a thermoplastic polymer matrix with uni-directional glass and carbon fibers set in cross-ply construction for enhanced performance and design control. The SP 2.3 comes with a Seawolf Grey/Burgundy polyester coating on both sides for enhanced aesthetics.

FEATURES

- Uni-directional glass and carbon
- > Ease to mold and finish
- > Light weight, thin, multiple layers
- > High performance, yet economical

PRODUCT TYPE AND COMPOSITION

Glass fiber content: 30%–35% Carbon fiber content: 22%–28% Polypropylene content: 30%–35% Polyester content: 3%–5% Acrylic content: 3%–5%

(Noted: Percentages are by volume and are nominal values)

TYPICAL APPLICATIONS

Medical Footplate

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	1.40 ± 0.15 (Calculated based upon material volume)
Thickness	2.2 mm-2.5 mm
Size	Cut to customer specifications from sheet of 91 x 122 cm (36 x 48 inches)
Forming Temperature	400°F for 3.0 min

SIZING

Item Code	Part Number	Length
SP 2.3 Small	F8513073601	230 mm (9.05in)
SP 2.3 Medium	F8513073606	250 mm (9.84in)
SP 2.3 Large	F8513073611	285 mm (11.22in)
SP 2.3 X-Large	F8513073611X	308 mm (12.12in)

MECHANICAL PROPERTIES

Properties	Method	Results
Flexural Rigidity	ASTM D790-10	> 1002 N-cm*
Flexural Modulus	ASTM D790-10	> 9.0 GPa*
Flexural Strength	ASTM D790-10	> 147.1 MPa*

^{*} Based upon 2.3 mm thickness

Revised 01/2020

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