PRODUCT DATA SHEET

TenCate PW-1000

CFRT® Woven Series Carbon/Glass Fiber

PRODUCT TYPE
Carbon (12K) fiber content: 25%
Glass (330) fiber content: 25%
Modified PMMA thermoplastic resin (50%)

TYPICAL APPLICATIONS
• Footwear
• Skates
• Recreational equipment

SHELF LIFE
Stable indefinitely at 77°F (25°C)
Materials must be dried prior to heating and thermoforming. Please refer to the TCPC Processing Instructions.

PRODUCTS DESCRIPTION
TenCate Cetex® PW-1000 is a continuous fiber reinforced thermoplastic (CFRT®) composite laminate. It blends the benefits of a thermoplastic polymer alloy with woven carbon and glass fibers in a plain weave for enhanced performance. The PW-1000 style laminate is available in a single layer product; carbon in one direction and glass fibers at a 90° orientation to the carbon that is ultra-thin, lightweight, and resilient for improved energy return.

PRODUCT BENEFITS/FEATURES
• Plain weave of 12K carbon fibers and glass (330) fibers
• Bi-directional carbon and glass reinforcement
• Lightest weight, thin single or multilayers
• Available in various colors

Composition:
Fibers........................ Carbon (12K) fiber content: 25%, Glass (330) fiber content: 25%
Resin............................ PMMA impact modified proprietary thermoplastic resin (50%).
(Noted: Percentages are by volume and are nominal values)

TENCATE PW-1000 MATERIAL PROPERTIES
Specific Gravity.......................................................... 1.48 g/cc
Thickness: 0.8 mm (0.031 inches) nominal. Available in single ply laminate.
Color: Various
Size: Cut to customer specifications from sheet of 91 x 122 cm (36 x 48 inches)

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Method</th>
<th>Results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexural Rigidity</td>
<td>RTD</td>
<td>ASTM D790-10</td>
<td>4.5 lbs-in²</td>
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<tr>
<td>Flexural Modulus</td>
<td>RTD</td>
<td>ASTM D790-10</td>
<td>1.2 Msi</td>
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<tr>
<td>Flexural Strength</td>
<td>RTD</td>
<td>ASTM D790-10</td>
<td>21.1 ksi</td>
</tr>
</tbody>
</table>

TYPICAL CONSOLIDATION PARAMETERS OR PROCESSING INFO
Recommended Processing Temperatures.........Forming 195°C to 200°C (383°F - 392°F)
Bonding 55°C to 60°C (131°F - 140°F)

PERFORMANCE versus COST

TENCATE PERFORMANCE COMPOSITES
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