



# Apium PEEK CFR

Carbon Fibre Reinforced Polyetheretherketone, a high performance thermoplastic compound with 30% fibers

## Description of the Material:

Apium PEEK CFR, Ø1,75 mm - High stiffness, high thermal resistance, high chemical resistance, bio inert, low warping, tight dimensional tolerances, low weight, easy to remove support, post treatment possible

## Applications:

Apium PEEK CFR is intended to be used for industrial applications. The material is lighter than Apium PEEK CFR 4000 and support structures are removed much easier.

## Material Properties: Raw Material

	Conditions	Test Methodology	Unit	Value
<b>Mechanical Properties</b>				
Tensile Strength	23° C	ISO 527	MPa	<b>190</b>
Tensile Elongation	23° C	ISO 527	%	<b>1.7</b>
Young's Modulus	23° C	ISO 527	MPa	<b>17500</b>
Impact Strength (Charpy)	23° C	ISO 179-1eU	kJ/m <sup>2</sup>	<b>45</b>
<b>Thermal Properties</b>				
Melting Temperature		ISO 11357	°C	<b>343</b>
Glass Transition Temperature		ISO 11357	°C	<b>143</b>
Decomposition Temperature			°C	<b>550</b>
<b>Miscellaneous</b>				
Density	Semi-Crystalline		g/cm <sup>3</sup>	<b>1.38</b>
<b>Electrical Properties</b>				
Volume Resistivity	23° C	ASTM D4496	Ωcm	<b>10<sup>5</sup></b>
Surface Resistance		IEC 60093	Ω	<b>-</b>
<b>Fire, Smoke and Toxicity</b>				
Glow Wire Test	2 mm Thickness	IEC 60695-2-12	°C	<b>960</b>
Oxygen Index	0.4 mm Thickness	ISO 4589	% O <sup>2</sup>	<b>-</b>
Toxicity Index	CO <sup>2</sup> Content	NES 713	n/a	<b>-</b>
Flame Retardancy Class				<b>-</b>

## Important remarks:

- 1) The data have been generated for Apium Additive Technologies in accordance with applicable national, international and internal standards and are intended for material comparison. Typical values may vary depending on part geometry and processing parameters.

For further information and detailed data please contact us.

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