



# Apium PEEK 4000 Natural

Polyetheretherketone, a high performance thermoplastic

## Description of the Material:

Apium PEEK 4000 Natural, Ø1,75 mm - High thermal resistance, high chemical resistance, high stress resistance, bio inert, low weight, post treatment possible

## Applications:

Apium PEEK 4000 shows a printing behaviour that is beneficial for material extrusion processes. On top of that, its polymer structure exhibits improved mechanical properties compared other PEEK filaments in the market.

## Material Properties: Raw Material

	Conditions	Test Methodology	Unit	Value
<b>Mechanical Properties</b>				
Tensile Strength	23° C	ISO 527	MPa	<b>94</b>
Tensile Elongation	23° C	ISO 527	%	<b>30</b>
Young's Modulus	23° C	ISO 527	MPa	<b>3600</b>
Impact Strength (Charpy)	23° C	ISO 179/1eU	kJ/m <sup>2</sup>	-
<b>Thermal Properties</b>				
Melting Temperature		ISO 11357	°C	<b>340</b>
Glass Transition Temperature		DIN 53765	°C	<b>143</b>
Decomposition Temperature			°C	<b>550</b>
<b>Miscellaneous</b>				
Density	Semi-Crystalline	ISO 1183	g/cm <sup>3</sup>	<b>1.3</b>
<b>Electrical Properties</b>				
Volume Resistivity		IEC 60093	Ωcm	<b>10<sup>14</sup></b>
Surface Resistance		IEC 60093	Ω	<b>10<sup>14</sup></b>
<b>Fire, Smoke and Toxicity</b>				
Glow Wire Test	GWIT 2 mm	IEC 60695-2-12/13	°C	<b>825</b>
	GWFI 2mm	IEC 60695-2-12/13	°C	<b>960</b>
Oxygen Index	3.2 mm	ISO 4589	%	<b>36</b>
Toxicity Index	CO <sup>2</sup> Content	NES 713	n/a	-
Flame Retardancy Class	UL 94	IEC 60695		<b>V-0</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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