

VICTREX® PEEK 450PF

➤ Product Description:

High performance thermoplastic material, unreinforced PolyEtherEtherKetone (PEEK), semi crystalline, fine powder for compression moulding, standard flow, FDA food contact compliant, colour natural.

➤ Material Properties

	CONDITIONS	TEST METHOD	UNITS	TYPICAL VALUE
Mechanical Data				
Tensile Strength	Yield, 23°C	ISO 527	MPa	98 *
Tensile Elongation	Break, 23°C	ISO 527	%	30 *
Tensile Modulus	23°C	ISO 527	GPa	4.0 *
Flexural Strength	23°C	ISO 178	MPa	160 *
Flexural Modulus	23°C	ISO 178	GPa	3.8 *
Izod Impact Strength	Notched, 23°C	ISO 180/A	kJ m ⁻²	7.0 *
	Unnotched, 23°C	ISO 180/U		n/b *

* Mechanical properties are reported on specimens injection moulded from polymer granules of similar melt viscosity

Thermal Data				
Melting Point		ISO 11357	°C	343
Glass Transition (Tg)	Onset	ISO 11357	°C	143
	Midpoint			150

Flow				
Melt Viscosity	400°C	ISO 11443	Pa.s	350

Miscellaneous				
Density		ISO 1183	g cm ⁻³	1.30
Bulk Density		ISO 1183	g cm ⁻³	0.30
Average Particle Size (D ₅₀)		ISO 13320-1	µm	50

Typical Processing Conditions				
Drying Temperature / Time	150°C / 3h or 120°C / 5h (residual moisture <0.02%)			
Processing Temperature	380-400°C			

Important notes:

- 1) Processing conditions quoted in our datasheets are typical of those used in our processing laboratories
- 2) Data are generated in accordance with prevailing national, international and internal standards, and should be used for material comparison. Actual property values are highly dependent on part geometry, mould configuration and processing conditions. Properties may also differ for along flow and across flow directions

Detailed data available on our website www.victrex.com or upon request

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