

VICTREX™ Grade VICTREX FG™ 700 FPD



Product Description

High performance thermoplastic material, unreinforced PolyEtherEtherKetone (PEEK), semi crystalline, fine powder for composite manufacture, easy flow, FDA food contact compliant, colour natural.

Typical Application Areas

Applications for higher strength in a static system. Low coefficient of thermal expansion. Chemically resistant to aggressive environments, suitable for sterilisation for medical and food contact applications.

MATERIAL PROPERTIES				
	CONDITIONS	TEST METHOD	UNITS	TYPICAL VALUE
Mechanical Data				
Tensile Strength	Break, 23°C	ISO 527	MPa	100*
Tensile Elongation	Break, 23°C	ISO 527	%	15*
Tensile Modulus	23°C	ISO 527	GPa	4.1*
Flexural Strength	23°C	ISO 178	MPa	170*
Flexural Modulus	23°C	ISO 178	GPa	3.9*
Izod Impact Strength	Notched, 23°C	ISO 180/A	kJ m ⁻²	4.5*
	Unnotched, 23°C	ISO 180/U		
Thermal Data				
Melting Point		ISO 11357	°C	343
Glass Transition (T _g)	Onset	ISO 11357	°C	143
	Midpoint			147
Flow				
Melt Viscosity	400°C	ISO 11443	Pa.s	130
Miscellaneous				
Density		ISO 1183	g cm ⁻³	1.30
Bulk Density		ISO1183	g cm ⁻³	0.3
Average Particle Size (D ₅₀)		ISO 13320-1	μ	10

*Results based on similar products

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

Important notes:

- Processing conditions quoted in our datasheets are typical of those used in our processing laboratories
 - Data for mould shrinkage should be used for material comparison. Actual mould shrinkage values are highly dependent on part geometry, mould configuration, and processing conditions.
 - Mould shrinkage differs for along flow and across flow directions. "Along flow" direction is taken as the direction the molten material is travelling when it exits the gate and enters the mould.
 - Mould shrinkage is expressed as a percent change in dimension of a specimen in relation to mould dimensions.
- 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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