

## Victrex® PEEK 150FW30 PEEK, 30% Carbon Fibre/PTFE Reinforced

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK) , Polyetheretherketone, PEEK, Carbon Fiber Filled , Polyetheretherketone, PEEK, PTFE-Filled

### Material Notes:

**Product Description:**High performance thermoplastic material, 30% reinforced with carbon fibre / PTFE Polyetheretherketone (PEEK), semi crystalline, granules for injection moulding, easy flow, FDA food contact compliant, colour black.**Typical Application Areas:**Tribological applications with thin cross sections or long flow lengths for high strength. Excellent wear resistance, very low coefficient of friction, low coefficient of thermal expansion. Chemically resistant to aggressive environments.**Information Provided by VICTREX®**

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Victrex-PEEK-150FW30-PEEK-30-Carbon-FibrePTFE-Reinforced.php](http://www.lookpolymers.com/polymer_Victrex-PEEK-150FW30-PEEK-30-Carbon-FibrePTFE-Reinforced.php)

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/in <sup>3</sup>	Crystalline; ISO 1183
Water Absorption at Saturation	0.30 % @Temperature 23.0 °C	0.30 % @Temperature 73.4 °F	Equilibrium; by immersion; ISO 62-1
Viscosity	250000 cP @Temperature 400 °C	250000 cP @Temperature 752 °F	melt; ISO 11443
Linear Mold Shrinkage, Flow	0.0010 cm/cm	0.0010 in/in	360°C nozzle, 160°C tool; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0060 cm/cm	0.0060 in/in	385°C nozzle, 180°C tool; ISO 294-4
Spiral Flow	16.5 cm @Thickness 1.00 mm	6.50 in @Thickness 0.0394 in	385°C nozzle, 180°C tool

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	89 @Temperature 23.0 °C	89 @Temperature 73.4 °F	ISO 868
Tensile Strength at Break	115 MPa @Temperature 125 °C	16700 psi @Temperature 257 °F	ISO 527
	180 MPa @Temperature 23.0 °C	26100 psi @Temperature 73.4 °F	ISO 527
Elongation at Break	1.8 % @Temperature 23.0 °C	1.8 % @Temperature 73.4 °F	ISO 527
Tensile Modulus	16.0 GPa @Temperature 23.0 °C	2320 ksi @Temperature 73.4 °F	ISO 527

Mechanical Properties	60.0 MPa Metric	8700 psi English	Comments
	@Temperature 275 °C	@Temperature 527 °F	
	100 MPa	14500 psi	ISO 178
	@Temperature 175 °C	@Temperature 347 °F	
	170 MPa	24700 psi	ISO 178
	@Temperature 125 °C	@Temperature 257 °F	
	280 MPa	40600 psi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Modulus	14.0 GPa	2030 ksi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Compressive Strength	60.0 MPa	8700 psi	ISO 604
	@Temperature 200 °C	@Temperature 392 °F	
	155 MPa	22500 psi	ISO 604
	@Temperature 120 °C	@Temperature 248 °F	
	210 MPa	30500 psi	ISO 604
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	6.50 kJ/m <sup>2</sup>	3.09 ft-lb/in <sup>2</sup>	ISO 180/A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	35.0 kJ/m <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	ISO 180/U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	3.50 J/cm <sup>2</sup>	16.7 ft-lb/in <sup>2</sup>	ISO 179/1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.500 J/cm <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	45.0 µm/m-°C	25.0 µin/in-°F	Average below Tg; ISO 11359
	@Temperature <=143 °C	@Temperature <=289 °F	
	110 µm/m-°C	61.1 µin/in-°F	Average above Tg; ISO 11359
	@Temperature >=143 °C	@Temperature >=289 °F	
	9.00 µm/m-°C	5.00 µin/in-°F	

Thermal Properties	Metric	English	Comments
	@Temperature <=143 °C	@Temperature <=289 °F	ISO 11359
	9.00 µm/m-°C	5.00 µin/in-°F	Above Tg; ISO 11359
	@Temperature >=143 °C	@Temperature >=289 °F	
Melting Point	343 °C	649 °F	ISO 11357
Deflection Temperature at 1.8 MPa (264 psi)	325 °C	617 °F	ISO 75-f
Glass Transition Temp, Tg	143 °C	289 °F	Onset; ISO 11357
	147 °C	297 °F	Midpoint; ISO 11357

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+7 ohm-cm	1.00e+7 ohm-cm	1V; IEC 60093

Processing Properties	Metric	English	Comments
Processing Temperature	<= 100 °C	<= 212 °F	Hopper Temperature
Mold Temperature	170 - 200 °C	338 - 392 °F	
	170 - 200 °C	338 - 392 °F	
Drying Temperature	120 °C	248 °F	
	@Time 18000 sec	@Time 5.00 hour	
	150 °C	302 °F	
	@Time 10800 sec	@Time 3.00 hour	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China