

VICTREX® PEEK 150CA30

Polyetheretherketone

Victrex plc

Message:

High performance thermoplastic material, 30% carbon fibre reinforced PolyEtherEtherKetone (PEEK), semi crystalline, granules for injection moulding, easy flow, FDA food contact compliant, colour black.

Complex geometries with thin cross sections or long flow length where higher strength in a static or dynamic system is required. Excellent wear resistance, low coefficient of friction, low coefficient of thermal expansion. Chemically resistant to aggressive environments.

General Information			
UL YellowCard	E161131-224300	E161131-531782	
Filler / Reinforcement	Carbon fiber reinforced material, 30% filler by weight		
Features	Semicrystallization		
	Low friction coefficient		
	High strength		
	Good liquidity		
	Good chemical resistance		
	Good wear resistance		
	Compliance of Food Exposure		
Agency Ratings	FDA Food Exposure, Not Rated		
	Rolls Royce #DMSRR 1018		
Appearance	Black		
Forms	Particles		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm³	ISO 1183
Spiral Flow	14.0	cm	Internal method
Molding Shrinkage ¹			
Vertical flow direction: 200°C	0.50	%	
Flow direction: 200°C	0.0	%	ISO 294-4
Water Absorption			ISO 62
23°C, 24 hr, 3.20 mm	0.040	%	ISO 62
Balance, 23°C, 3.20mm, 50% RH	0.30	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, 23°C)	88		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	26000	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Fracture, 23°C	260	MPa	ISO 527-2

Fracture, 125°C	150	MPa	ISO 527-2
Fracture, 175°C	95.0	MPa	ISO 527-2
Fracture, 275°C	55.0	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	1.5	%	ISO 527-2
Flexural Modulus (23°C)	24000	MPa	ISO 178
Flexural Stress			ISO 178
23°C	360	MPa	ISO 178
125°C	250	MPa	ISO 178
175°C	120	MPa	ISO 178
225°C	60.0	MPa	ISO 178
Compressive Stress			ISO 604
23°C	300	MPa	ISO 604
120°C	200	MPa	ISO 604
200°C	70.0	MPa	ISO 604
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	45	kJ/m ²	ISO 179/1U
Notched Izod Impact (23°C)	7.5	kJ/m ²	ISO 180/A
Unnotched Izod Impact Strength (23°C)	40	kJ/m ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	339	°C	ISO 75-2/A
Glass Transition Temperature	143	°C	ISO 11357-2
Melting Temperature	343	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow: < 143°C	5.0E-6	cm/cm/°C	ISO 11359-2
Flow: > 143°C	6.0E-6	cm/cm/°C	ISO 11359-2
Lateral: < 143°C	4.0E-5	cm/cm/°C	ISO 11359-2
Lateral: > 143°C	1.0E-4	cm/cm/°C	ISO 11359-2
Specific Heat (23°C)	1800	J/kg/°C	DSC
Thermal Conductivity (23°C)	0.95	W/m/K	Internal method
RTI Imp	200	°C	UL 746
RTI	240	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity ² (23°C)	1.0E+5	ohms · cm	ASTM D4496
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index (2.00 mm)	960	°C	IEC 60695-2-12
Toxicity			NES 713
CO Content	0.0500		NES 713
CO2 Content	0.120		NES 713
Total Gases	0.170		NES 713
Fill Analysis	Nominal Value	Unit	Test Method

Melt Viscosity (400°C)	320	Pa·s	ISO 11443
Injection	Nominal Value	Unit	
Drying Temperature	120 - 150	°C	
Drying Time	3.0 - 5.0	hr	
Hopper Temperature	< 100	°C	
Rear Temperature	365	°C	
Middle Temperature	370 - 375	°C	
Front Temperature	380	°C	
Nozzle Temperature	385	°C	
Mold Temperature	180 - 210	°C	
Injection instructions			
Runner: Die / nozzle >3mm, manifold >3.5mmGate: >2mm or 0.5 x part thickness			
NOTE			
1.	385°C nozzle		
2.	1V		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

