VICTREX® PEEK 90GL30 BLACK EU

PEEK-GF30 — Victrex plc

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.3**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.9**	%	ISO 294-4, 2577
Thermal conductivity of melt	**0.3**	W/(m K)	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**12000**	MPa	ISO 527
Stress at break	**180**	MPa	ISO 527
Strain at break	**2.2**	%	ISO 527
Flexural modulus, 23°C	**11500**	MPa	ISO 178
Flexural strength	**275**	MPa	ISO 178
Izod impact strength, +23°C	**40**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**8**	kJ/m²	ISO 180/1A
Shore D hardness	**87**	-	ISO 7619-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**343**	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	**143**	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	**335**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**20**	E-6/K	ISO 11359-1/-2
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**2**	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	**1E14**	Ohm*m	IEC 62631-3-1
Electric strength	**21.5**	kV/mm	IEC 60243-1
Comparative tracking index	**150**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**0.3**	%	Sim. to ISO 62
Density	**1520**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120 - 150**	°C	-
Pre-drying - Time	**3 - 5**	h	-
Processing humidity	**≤0.02**	%	-
Mold temperature	**170 - 200**	°C	-
Feed temperature	**≤100**	°C	-
Zone 1	**355**	°C	-
Zone 2	**360**	°C	-
Zone 3	**360**	°C	-
Zone 4	**365**	°C	-
Nozzle temperature	**370**	°C	-

Characteristics

Processing
Injection Molding

Certifications
Food contact, Food approval FDA 21 CFR

Delivery form
Pellets, Black

Applications
Medical

Special Characteristics
Sterilizable

Chemical Resistance
General Chemical Resistance

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa