

VICTREX® PEEK 450GL15

PEEK-GF15

Victrex plc

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5	%	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	7500	MPa	ISO 527
Stress at break	145	MPa	ISO 527
Strain at break	4	%	ISO 527
Flexural modulus, 23°C	7200	MPa	ISO 178
Flexural strength	240	MPa	ISO 178
Charpy impact strength, +23°C	60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5.5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	60	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	7	kJ/m ²	ISO 180/1A
Shore D hardness	86	-	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	298	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	25	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Dissipation factor, 1MHz	50	E-4	IEC 62631-2-1
Volume resistivity	1E14	Ohm*m	IEC 62631-3-1
Electric strength	24	kV/mm	IEC 60243-1
Comparative tracking index	150	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.4	%	Sim. to ISO 62
Density	1380	kg/m ³	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	360	°C	-
Zone 2	365	°C	-
Zone 3	370	°C	-
Zone 4	375	°C	-
Nozzle temperature	380	°C	-

Characteristics**Processing**

Injection Molding, Other Extrusion

Delivery form

Pellets, Natural Color

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Medical

Special Characteristics

Sterilizable

Chemical Resistance

General Chemical Resistance

Regional Availability

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