

**VICTREX® PEEK 450G903 BLACK**

PEEK

Victrex plc

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.9	%	ISO 294-4, 2577
Molding shrinkage, normal	1.3	%	ISO 294-4, 2577
Thermal conductivity of melt	0.29	W/(m K)	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	3900	MPa	ISO 527
Yield stress	98	MPa	ISO 527
Strain at break	30	%	ISO 527
Flexural modulus, 23°C	3800	MPa	ISO 178
Izod impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	7	kJ/m <sup>2</sup>	ISO 180/1A
Shore D hardness	84.5	-	ISO 7619-1

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
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	152	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	45	E-6/K	ISO 11359-1/-2
Oxygen index	35	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	2	mm	-

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Dissipation factor, 1MHz	40	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	0.45	%	Sim. to ISO 62
Density	1300	kg/m <sup>3</sup>	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	365	°C	-
Zone 4	370	°C	-
Nozzle temperature	375	°C	-

**Characteristics****Processing**

Injection Molding, Other Extrusion

**Delivery form**

Pellets, Black

**Chemical Resistance**

General Chemical Resistance

**Certifications**

Food contact, Food approval FDA 21 CFR

**Special Characteristics**

Sterilizable

**Features**

Ductile

**Applications**

Medical

**Regional Availability**

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