VICTREX® ST™ 45GL30

PEKEKK-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	**195**	MPa	ISO 527
Strain at break	**2.8**	%	ISO 527
Flexural modulus, 23°C	**11000**	MPa	ISO 178
Flexural strength	**280**	MPa	ISO 178
Charpy impact strength, +23°C	**70**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**9**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**60**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**11**	kJ/m²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**387**	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	**162**	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	**380**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**21**	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Dissipation factor, 1MHz	**40**	E-4	IEC 62631-2-1
Volume resistivity	**1E14**	Ohm*m	IEC 62631-3-1
Electric strength	**22**	kV/mm	IEC 60243-1
Comparative tracking index	**150**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Density	**1530**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**150 - 180**	°C	-
Pre-drying - Time	**3 - 6**	h	-
Processing humidity	**≤0.02**	%	-
Mold temperature	**200 - 220**	°C	-
Feed temperature	**≤100**	°C	-
Zone 1	**385**	°C	-
Zone 2	**395**	°C	-
Zone 3	**400**	°C	-
Zone 4	**405**	°C	-
Nozzle temperature	**410**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets, Natural Color

Chemical Resistance
General Chemical Resistance

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