

Product Texts

High performance Food Grade thermoplastic material, unreinforced and reinforced PolyEtherEtherKetone (PEEK), semi crystalline, granules for injection moulding and extrusion, colour black.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577
Thermal conductivity of melt	0.85	W/(m K)	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	150	MPa	ISO 527
Strain at break	2.3	%	ISO 527
Flexural modulus, 23°C	11500	MPa	ISO 178
Flexural strength	230	MPa	ISO 178
Izod impact strength, +23°C	35	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	7	kJ/m ²	ISO 180/1A
Shore D hardness	83	-	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	315	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	15	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	1E8	Ohm*m	IEC 62631-3-1

Other properties	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Density	1450	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	365	°C	-
Zone 2	370	°C	-
Zone 3	375	°C	-
Zone 4	380	°C	-
Nozzle temperature	385	°C	-

Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Pellets, Black

Special Characteristics

Sterilizable

Chemical Resistance

General Chemical Resistance

Certifications

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact KTW, Drinking water contact DVGW W270

Regional Availability

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