

Product Texts

High performance Food Grade thermoplastic material, unreinforced, glass fiber and carbon fiber 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	0.1	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577
Thermal conductivity of melt	0.95	W/(m K)	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	265	MPa	ISO 527
Strain at break	1.7	%	ISO 527
Flexural modulus, 23°C	24000	MPa	ISO 178
Flexural strength	380	MPa	ISO 178
Izod impact strength, +23°C	50	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	10.5	kJ/m ²	ISO 180/1A
Shore D hardness	87.5	-	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	336	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	5	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Volume resistivity	1000	Ohm*m	IEC 62631-3-1

Other properties	Value	Unit	Test Standard
Water absorption	0.3	%	Sim. to ISO 62
Density	1400	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	180 - 210	°C	-
Feed temperature	≤100	°C	-
Zone 1	375	°C	-
Zone 2	380	°C	-
Zone 3	385	°C	-
Zone 4	390	°C	-
Nozzle temperature	395	°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

Features

Ductile, Fatigue Resistance

Regional Availability

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