

Raw Material Polyetheretheketone (PEEK)

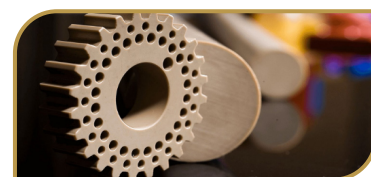
General Properties	Test Method	Unit	Value
Density	ISO 1183	g/cm ³	1.3
Water Absorption In Air 50% r.h.	ISO 62	%	0.1
Absorption 23-C In Water-Saturation	ISO 62:1999(modified)	%	0.5
Food Compliance	-	FDA/BfR	YES
UV Stability	-	-	YES
Mechanical Properties			
Tensile Strength At Yield At Break	ISO 527-1/2:1993	N/mm ²	95
Elongation at Break	ISO 527-1/2:1993	%	25
Tensile Modulus Of Elasticity	ISO 527-1/2:1993	N/mm ²	3000
Impact Strength Charpy 7.5 J	ISO 604:2002	KJ/mm ²	NO BREAK
Notched Impact Strenght Charpy	ISO 180:2000	KJ/mm ²	-
Compression Test 1% Strain 1000h	-	N/mm ²	80
Rockwell Hardness (Dry)	ISO 868:2003	Scale M	100
Coefficient Of Friction To Steel	ISO 8295	-	0.38
Thermal Properties			
Melting Temperature	ISO 3146	°C	340
Thermal Conductivity	ISO 8301:1991	W/(km)	0.25
Deformation at temperature HDT	ISO 75	°C	140
Linear Expansion Coeficient 23-60Degrees	ISO 11359-2:1999	10 ⁻⁶ K ⁻¹	50
Minimum Operating Temperature	Average	°C	-50
Operating Temperature Continuously	Average	°C	260
Operating Tem Short Period-no load	Average	°C	300
Flammability	UL 94 (3-6mm thickness)	-	-
Electrical Properties			
Dielectric Constant at 1 MHz	ISO 250	-	3.2
Dissipation Factor Tan Δ at 1 MHz	ISO 250	-	0.003
Volume Resistivity	ISO 93	Ωcm	1 x 10 ¹⁷
Dielectric Strength	ISO 243	KV/mm	20

Applications:

- Compressor Valves & Rings
- Transmission Components
- Centrifugal Pump Wear Parts
- Precision Cutting Blades

Characteristics:

- Excellent Mechanical Properties
- Excellent Thermal Properties
- Superior Wear / Creep Resistance
- Non Flammability



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