

Doriflon Specification Sheet

Material Name	Peek 450G			
Description	Polyetheretherketone			
Remarks and Applications	Very high maximum service temperature Excellent mechanical strength, wear resistance, chemical resistance with good dimensional stability			
Typical Properties				
Property	Conditions	ISO	Units	Value
General Properties				
Specific Gravity			g/cm ³	1.32
Water Absorption @ 23°C				
- in water 24 hours			%	.14
- saturation in water			%	.45
Colour				Fawn
Thermal Properties				
Melting Point			°C	334
Minimum Working Temperature			°C	-60
Continuous Working Temperature			°C	250
Thermal Conductivity			W/K.m	.25
Linear Thermal Expansion Coefficient			K ⁻¹ x10 ⁻⁵	4.7
Flammability			UL (thickness)	V-0 (1.45mm)
Mechanical Properties				
Tensile Strength @ 23°C, dry			N/mm ²	92
Tensile Modulus @ 23°C, dry			N/mm ²	3600
Flexural Modulus			N/mm ²	3660
Shear Strength			N/mm ²	24
Elongation @ 23°C, dry			%	50
Flexural Strength @ 23°C, dry			N/mm ²	170
Hardness Shore D @ 23°C, dry				
Hardness Rockwell @ 23°C, dry				R120
Deformation under load				
- 14 N/mm ² for 24 hours at 50°C			%	.275
- 8 N/mm ² for 24 hours at 150°C			%	
- 14 N/mm ² for 24 hours at 150°C			%	
Impact Strength			Izod J/m	83
Electrical Properties				
Volume Resistivity			Ohm.cm	4-9x10 ¹⁶
Dielectric Strength			kV/mm	25
Relative Permittivity 50Hz-10kHz				3.4
Resistance Properties				
Outside Applications - UV Resistance				A
Acids, Weak pH > 3				A
Acids, Strong pH < 3				A
Alkalis, Strong pH > 11				A
Chlorinated Hydrocarbons				A
Hot Water				A