Doriflon Specification Sheet

Material Name	**Modified Peek**
Description	Polyetheretherketone (10% Carbon, 10% Graphite, 10% PTFE)
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/cm³	1.45
Water Absorption @ 23°C				
- in water 24 hours			%	.05
- saturation in water			%	.30
Colour				Black
Thermal Properties				
Melting Point			°C	340
Minimum Working Temperature			°C	-60
Continuous Working Temperature			°C	250
Thermal Conductivity			W/K.m	.24
Linear Thermal Expansion Coefficient			$K^{-1}x10^{-5}$	2.2
Flammability			UL (thickness)	V-0 (1.45mm)
Mechanical Properties				
Tensile Strength @ 23°C, dry			N/mm²	118
Tensile Modulus @ 23°C, dry			N/mm²	10,000
Flexural Modulus			N/mm²	10,000
Shear Strength			N/mm²	
Elongation @ 23°C, dry			%	3
Flexural Strength @ 23°C, dry			N/mm²	210
Hardness Shore D @ 23°C, dry				
Hardness Rockwell @ 23°C, dry				M85
Deformation under load				
- 14 N/mm² for 24 hours at 50°C			%	
- 8 N/mm² for 24 hours at 150°C			%	
- 14 N/mm² for 24 hours at 150°C			%	
Charpy Impact Strength			kJ/m²	2.5
Electrical Properties				
Volume Resistivity			Ohm.cm	
Dielectric Strength			kV/mm	
Relative Permitivity 50Hz-10kHz				
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