

# Doriflon Specification Sheet

Material Name	<b>Peek</b>				
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	
<b>General Properties</b>					
Specific Gravity			g/cm <sup>3</sup>	1.32	
Water Absorption @ 23°C					
- in water 24 hours			%	.14	
- saturation in water			%	.45	
Colour				Fawn	
<b>Thermal Properties</b>					
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 <sup>-1</sup> x10 <sup>-5</sup>	4.7	
Flammability			UL (thickness)	V-0 (1.45mm)	
<b>Mechanical Properties</b>					
Tensile Strength @ 23°C, dry			N/mm <sup>2</sup>	92	
Tensile Modulus @ 23°C, dry			N/mm <sup>2</sup>	3600	
Flexural Modulus			N/mm <sup>2</sup>	3660	
Shear Strength			N/mm <sup>2</sup>	24	
Elongation @ 23°C, dry			%	50	
Compression strength (1%/2%)			N/mm <sup>2</sup>	23/43	
Compression Modulus			N/mm <sup>2</sup>	3400	
Flexural Strength @ 23°C, dry			N/mm <sup>2</sup>	170	
Hardness Shore D @ 23°C, dry					
Hardness Rockwell @ 23°C, dry				R120	
Deformation under load					
- 14 N/mm <sup>2</sup> for 24 hours at 50°C			%	.275	
- 8 N/mm <sup>2</sup> for 24 hours at 150°C			%		
- 14 N/mm <sup>2</sup> for 24 hours at 150°C			%		
Impact Strength			Izod J/m	83	
<b>Electrical Properties</b>					
Volume Resistivity			Ohm.cm	4-9x10 <sup>16</sup>	
Dielectric Strength			kV/mm	25	
Relative Permittivity 50Hz-10kHz				3.4	
<b>Resistance Properties</b>					
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	