

Doriflon Specification Sheet

Material Name	PTFE 25% Carbon filled			
Description	25% Carbon filled PTFE			
Remarks and Applications	Excellent chemical resistance Improved wear resistance over virgin PTFE			
Typical Properties				
Property	Conditions	ISO	Units	Value
General Properties				
Specific Gravity			g/cm ³	2.06-2.11
Water Absorption @ 23°C				
- in water 24 hours			%	<0.2
- saturation in water			%	<1.0
Colour				Black
Thermal Properties				
Melting Point			°C	327
Minimum Working Temperature			°C	
Continuous Working Temperature			°C	-260 to 260
Thermal Conductivity			W/K.m	0.54
Linear Thermal Expansion Coefficient			K ⁻¹ x10 ⁻⁵	8.6
Flammability			UL (thickness)	
Mechanical Properties				
Tensile Strength @ 23°C, dry			N/mm ²	11-15
Tensile Modulus @ 23°C, dry			N/mm ²	392-569
Flexural Modulus			N/mm ²	1400
Shear Strength			N/mm ²	
Elongation @ 23°C, dry			%	60-70
Flexural Strength @ 23°C, dry			N/mm ²	
Hardness Shore D @ 23°C, dry				60-69
Hardness Rockwell @ 23°C, dry				
Deformation under load				
- 14 N/mm ² for 24 hours at 50°C			%	
- 8 N/mm ² for 24 hours at 150°C			%	
- 14 N/mm ² for 24 hours at 150°C			%	3.5
Impact Strength			Izod J/m	500
Electrical Properties				
Volume Resistivity			Ohm.cm	>10 ⁶
Dielectric Strength			kV/mm	
Relative Permittivity 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