

Doriflon Specification Sheet

Material Name	Delrin			
Description	Delrin (Acetal homopolymer)			
Remarks and Applications	High mechanical strength Good dimensional stability Good sliding properties and wear resistance			
Typical Properties				
Property	Conditions	ISO	Units	Value
General Properties				
Specific Gravity			g/cm ³	1.43
Water Absorption @ 23°C				
- in water 24 hours			%	.21
- saturation in water			%	0.85
Colour				White/Black
Thermal Properties				
Melting Point			°C	175
Minimum Working Temperature			°C	-50
Continuous Working Temperature			°C	105
Thermal Conductivity			W/K.m	.31
Linear Thermal Expansion Coefficient			K ⁻¹ x10 ⁻⁵	11
Flammability			UL (thickness)	HB(3mm)
Mechanical Properties				
Tensile Strength @ 23°C, dry			N/mm ²	70
Tensile Modulus @ 23°C, dry			N/mm ²	3105
Flexural Modulus			N/mm ²	2620
Shear Strength			N/mm ²	66
Elongation @ 23°C, dry			%	>30
Flexural Strength @ 23°C, dry			N/mm ²	98
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			%	1.0
- 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	100
Electrical Properties				
Volume Resistivity			Ohm.cm	>10 ¹⁵
Dielectric Strength			kV/mm	20
Relative Permittivity 50Hz-10kHz				3.7
Resistance Properties				
Outside Applications - UV Resistance				D
Acids, Weak pH > 3				C
Acids, Strong pH < 3				D
Alkalis, Strong pH > 11				D
Chlorinated Hydrocarbons				A
Hot Water				D