

Doriflon Specification Sheet

Material Name		Nylon 6			
Description		Polyamide 6			
Remarks and Applications		General purpose engineering plastic			
Typical Properties					
Property	Conditions	ISO	Units	Value	
General Properties					
Specific Gravity			g/cm ³	1.14	
Water Absorption @ 23°C					
- in water 24 hours			%	2.9	
- saturation in water			%	9.5	
Colour				White	
Thermal Properties					
Melting Point			°C	213	
Minimum Working Temperature			°C	-40	
Continuous Working Temperature			°C	85	
Thermal Conductivity			W/K.m	.24	
Linear Thermal Expansion Coefficient			K ⁻¹ x10 ⁻⁵	8.5	
Flammability			UL (thickness)	Self Extinguishing	
Mechanical Properties					
Tensile Strength @ 23°C, dry			N/mm ²	61-79	
Tensile Modulus @ 23°C, dry			N/mm ²	2745	
Flexural Modulus			N/mm ²	2600	
Shear Strength			N/mm ²	-	
Elongation @ 23°C, dry			%	20-200	
Flexural Strength @ 23°C, dry			N/mm ²	85.91	
Hardness Shore D @ 23°C, dry				77	
Hardness Rockwell @ 23°C, dry				110	
Deformation under load					
- 14 N/mm ² for 24 hours at 50°C			%	2.0-3.5	
- 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	150	
Electrical Properties					
Volume Resistivity			Ohm.cm	>10 ¹²	
Dielectric Strength			kV/mm	>12	
Relative Permittivity 50Hz-10kHz				3.7	
Resistance Properties					
Outside Applications - UV Resistance				C	
Acids, Weak pH > 3				B	
Acids, Strong pH < 3				D	
Alkalis, Strong pH > 11				C	
Chlorinated Hydrocarbons				A	
Hot Water				C	