

Doriflon Specification Sheet

Material Name	Nylon 12			
Description	Polyamide 12			
Remarks and Applications	Lowest moisture absorption of any Nylon Good dimensional stability & mechanical properties			
Typical Properties				
Property	Conditions	ISO	Units	Value
General Properties				
Specific Gravity			g/cm ³	1.01
Water Absorption @ 23°C				
- in water 24 hours			%	
- saturation in water			%	1.5
Colour				White
Thermal Properties				
Melting Point			°C	172-180
Minimum Working Temperature			°C	-40
Continuous Working Temperature			°C	70
Thermal Conductivity			W/K.m	.30
Linear Thermal Expansion Coefficient			K ⁻¹ x10 ⁻⁵	
Flammability			UL (thickness)	
Mechanical Properties				
Tensile Strength @ 23°C, dry			N/mm ²	48
Tensile Modulus @ 23°C, dry			N/mm ²	1400
Flexural Modulus			N/mm ²	900
Shear Strength			N/mm ²	
Elongation @ 23°C, dry			%	200
Flexural Strength @ 23°C, dry			N/mm ²	
Hardness Shore D @ 23°C, dry				
Hardness Rockwell @ 23°C, dry				R110
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			%	
Impact Strength			Izod J/m	150
Electrical Properties				
Volume Resistivity			Ohm.cm	>10 ¹⁵
Dielectric Strength			kV/mm	90
Relative Permittivity 50Hz-10kHz				
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