

Doriflon Specification Sheet

Material Name		PVDF			
Description		Polyvinylidene Fluoride			
Remarks and Applications		Excellent chemical resistance			
Typical Properties					
Property		Conditions	ISO	Units	Value
General Properties					
	Specific Gravity			g/cm ³	1.78
	Water Absorption @ 23°C				
	- in water 24 hours			%	.03
	- saturation in water			%	.04
	Colour				White
Thermal Properties					
	Melting Point			°C	177
	Minimum Working Temperature			°C	
	Continuous Working Temperature			°C	-40 to 150
	Thermal Conductivity			W/K.m	.19
	Linear Thermal Expansion Coefficient			K ⁻¹ ×10 ⁻⁵	13-17
	Flammability			UL (thickness)	Self Extinguishing
Mechanical Properties					
	Tensile Strength @ 23°C, dry			N/mm ²	54
	Tensile Modulus @ 23°C, dry			N/mm ²	2400
	Flexural Modulus			N/mm ²	2300
	Shear Strength			N/mm ²	
	Elongation @ 23°C, dry			%	80
	Flexural Strength @ 23°C, dry			N/mm ²	74
	Hardness Shore D @ 23°C, dry				D77
	Hardness Rockwell @ 23°C, dry				R100-115
	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	90
Electrical Properties					
	Volume Resistivity			Ohm.cm	5×10 ¹⁴
	Dielectric Strength			kV/mm	20.6
	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