F01 - PTFE Vergine

Physical - Mechanical

PROPERTIES	UNIT	Method	DATA - MOULDED
Density	g/cm³	ASTM D792	2,14 - 2,18
Hardness - Shore D	/	ASTM D2240	≥ 51
Tensile Strength - CD	N/mm ²	ISO12086 - ISO 527	≥ 24
Elongation at break - CD	%	ISO 12086 - ISO 527	≥ 250
Compressive strength at 1% deformation - CD	N/mm ²	ASTM D695	4 - 5
Deformation under load at room temperature after 24 hours at 13,7 N/mm2 - CD	%	ASTM D621	≤ 17
Permanent deformation as above after 24 hours of rest at room temperature - CD	%	ASTM D621	≤ 9
Deformation under load at 260 °C after 24 hours at 41 N/mm2 - CD	%	ASTM D621	≤ 32
Permanent deformation as above after 24 hours of rest at room temperature - CD	%	ASTM D621	≤ 19
Impact strength Izod	J/m	ASTM D256	153

Tribological

PROPERTIES	UNIT	Method	DATA - MOULDED
Dynamic coefficient of friction	/	ASTM D1894 ASTM D3702	0,06
Wear factor K	/	ASTM D3702	2.900
PV limit at 3 m/min at 30 m/min at 300 m/min	N/mm² • m/min	/	2,4 4,2 5,7

Thermal

PROPERTIES	UNIT	Method	DATA - MOULDED
Service Temperature (min - max)	°C	/	- 200 / + 260
Thermal expansion coefficient (linear) 25 - 100°C	10⁻⁵(mm/mm)/ °C	Similar to ASTM D696	12 - 13

Electrical

PROPERTIES	UNIT	Method	DATA - MOULDED
Dielectric strength (specimen 0,5 mm thick)	KV/mm	ASTM D149	≥ 40
Dielectric Constant at 60 Hz and 106 Hz	/	ASTM D150	2,05 - 2,10
Volume Resistivity	Ω•cm	ASTM D257	1018
Surface Resistivity	Ω	ASTM D257	10 ¹⁷

CD=Cross Direction

The data we are herewith providing are all based on laboratory testing and are proposed to technical designers as ossible and useful advice. Deviations from the values hereabove indicated may occur, but they do not constitute themselves either detriment of quality or reason for rejection.

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