Rich Kunststoffen

PTFE DATASHEET FG-10/2011

Properties	Unit	Method	Data - Moulded
PHYSICAL - MECHANICAL			
Density	g/cm³	ASTM D792	**2,14 - 2,18**
Hardness - Shore D	/	ASTM D2240	**≥ 51**
Tensile Strength - CD	N/mm²	ISO 527 v = 50mm/min microtensile die	**≥ 24**
Elongation at break - CD	%	ISO 527 v = 50mm/min microtensile die	**≥ 250**
Compressive strength at 1% deformation - CD	N/mm²	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			
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			
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			
Dielectric strength (specimen 0,5 mm thick)	KV/mm	ASTM D149	**≥ 40**
Dielectric Constant at 60 Hz and 10^6 Hz	/	ASTM D150	**2,05 - 2,10**
Volume Resistivity	**Ω** • cm	ASTM D257	**10^{18}**
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 possible 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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