KETEFSAN MÜHENDİSLİK

You Imagine **We Machine**

TECHNICAL DATA SHEET

VIRGIN PTFE MOULDED

PHYSICAL - MECHANICAL

Properties	Unit	Method	Data-Extruded
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 24 Hours at 13,7 N/mm² - CD	%	ASTM D621	≤ 17
Permanent deformation as above after releasing of 24 hours 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-Extruded
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-Extruded
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-Extruded
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