


PTFE/530				
Material Data Sheet	Compound	530	Rev.0	
	Designation	PTFE	Mar. 2019	

Product Description

PTFE/530 is a filled compound based on Virgin PTFE containing 50% Stainless steel (AISI 316 L) for Ram Extrusion, Compression and Isostatic moulding.

	Property	Method	Units	Specification
Physical	Color	-	-	Gray
	Specific gravity	ASTM D792	g/cm ³	3,30 – 3,40
	Water absorption	ASTM D570	%	0,03
	Flamability	UL 94		V-0
Mechanical	Tensile strength	ASTM D4745	MPa	≥ 15
	Elongation	ASTM D4745	%	≥ 130
	Hardness	ASTM D2240	Shore D	≥ 65
	Ball Hardness	ASTM D785	MPa	≥ 30
	Deformation under load (140 Kg/cm ² for 24 hrs. At 23°C)	ASTM D621	%	6 - 7,5
	Permanent deformation (after 24 hrs. Relaxation at 23°C)	ASTM D621	%	2,5 - 4,5
	Coefficient of static friction	ASTM D1894		0,16 – 0,18
	Coefficient of dynamic friction	ASTM D1894		0,13– 0,15
	Wear coefficient		$\frac{\text{cm}^3 \text{ min}}{\text{Kg m h}} 10^{-8}$	30 - 40
Thermal	Thermal conductivity	ASTM C177	W/ m·K	0,65
	Coefficient of linear thermal expansion From 25 to 100 °C	ASTM D696	10 ⁻⁵ / °C	10 - 11,5
Electrical	Volume resistivity	ASTM D257	Ohm·cm	10 ⁷
	Surfaceresistivity	ASTM D257	Ohm	10 ⁶

The results given in this datasheet are obtained on standard specimen following standard test procedures and are not comparable to finished products due to differences in the products profile. It is the customer's responsibility to evaluate parts prior to use in order to assure that parts will perform satisfactorily in their application.