Typical Properties of PET

	ASTM Test Method	Value
Mechanical Properties		
Tensile Strength at Break	ASTM D638	12,330 psi
Elongation at Break	ASTM D638	23%
Modulus of Elasticity in Tension	ASTM D638	471 kpsi
Charpy Impact Strength +23°C	ISO 179/1 ep	59 kJ/m^2
Charpy Notched Impact Strength	ISO 179/1 epA	3.9 kJ/m^2
Hardness Shore Scale D	-	84
Thermal Properties		
Melting Point Method A	ASTM D3418	490°F
Max Service Temp. for Few Hours Operation	-	320°F
TEP 5,000 Hours (50% of Tensile Strength) [1)]	IEC 216	239°F
TEP 20,000 Hours (50% of Tensile Strength) [1)]	IEC 216	212°F
Thermal Coefficient of Linear Expansion	ASTM D696	3.9 x 10^{-5} in/in/°F
Thermal Conductivity Method A	ASTM C177	2 Btu-in/hr-ft2-°F
Dielectric Properties		
Dielectric Constant 1 kHz	ASTM D150	3.40
Dissapation Factor 1 kHz	ASTM D150	0.002
Dielectric Strength	ASTM D149	400 V/mil
Flammability	UL 94	V-0
Surface Resistivity R_{OA}	ASTM D257	> $10^{13}\Omega$
Miscellaneous Properties		
Mass Density Method D, E	ISO 1183	1.4 g/cm^3
Water Absorption at 73°F 24 hours	ASTM D570	0.10%
Water Absorption at 73°F Saturation	ASTM D570	0.00%
Resistance to Wear [2)]	ISO 7148-2	1.9 µm/km
Coefficient of Friction [2)] static	ISO 7148-2	0.18 - 0.25
Coefficient of Friction [2)] dynamic	ISO 7148-2	0.23 - 0.29
Compressive Stress at 2%/5% normal strain	ASTM D695	7,687/14,750 psi
Compressive Stress at Maximum Strain	ASTM D695	15,450 psi
Creep Test 1,000 Hours	ISO 899/1	92,850 psi

[1)] Data of resin only

[2)] Made by a pin/rotating disc test according DIN-ISO 7148-2 under following conditions

R_a = 0.35 - 0.45 µm (steel disc), v = 0.3 m/s, p = 3 N/mm^2, time T > 16h