

PET, Natural

**PET, with PTFE
lubricant**

Mechanical Properties			
Density at 20°C	1,38	1,44	g/cm ³
Tensile strength @ yield	85	70	MPa
Elongation @ break	15	10	%
Tensile modulus of elasticity	3,000	2,600	MPa
Notched impact strength (Charpy)	2	2	kJ/m ²
Ball indentation hardness	170	160	N/mm ²
Hardness (Shore D)	84	-	Scale D
Electrical Properties			
Volume resistivity	10 ¹⁸	10 ¹⁸	Ohm cm
Surface resistivity	10 ¹⁶	10 ¹⁶	Ohm
Dielectric constant, 50 Hz	3.4	3.4	-
Dielectric dissipation factor, 50 Hz	0.01	0.01	-
Dielectric strength	20	20	Kv/mm
Comparative tracing index (CTI), Solution 'A'	600	600	-
Thermal Properties			
Melting temperature	255	255	°C
Heat deflection temperature - method A, 1.8 MPa	80	75	°C
Coefficient of thermal expansion (Ave. between 20 - 60 °C)	60	65	10 ⁻⁶ .K ⁻¹
Specific thermal capacity at 100°C	1.10	-	kJ/(kg - K)
Thermal conductivity at 20°C	0.28	0.28	W/(m -K)
Service temperatures without high mechanical load - long term	-20 to +115	-20 to +115	°C
Service temperature - short term (max)	+180	+180	
Chemical resistance			
Acid resistance	+		
Alkali resistance	0		
Hydrocarbon resistance	+		
Chlorinated hydrocarbon resistance	0		
Aromatic resistance	+		
Ketone resistance	+		
Resistance to hot water	-		

Key: + = YES 0 = LIMITED - = NO