

## Seflon® Properties of Fluoropolymers PTFE

	PROPERTIES	UNIT	ASTM TEST METHOD	PTFE
PHYSICAL	Melting Point	°C	-	327
	Specific Gravity	-	D792	2.14-2.20
MECHANICAL	Tensile Strength	Mpa {kgf/cm <sup>2</sup> }	D638	13.7-34.3 {140-350}
	Elongation	%	D638	200-400
	Compressive Strength	Mpa {kgf/cm <sup>2</sup> }	D695	11.8 {120}
	Impact Strength (Aizot)	J/m {kgf•cm/cm}	D526A	160 {16.3}
	Hardness (Rockwell)	-	D785	-
	Hardness (Shore)	-	D2240	D50-55
	Bending elasticity	GPa {10 <sup>3</sup> kgf/cm <sup>2</sup> }	D790	0.55 {5.6}
	Tensile Strength	GPa {10 <sup>3</sup> kgf/cm <sup>2</sup> }	D638	0.40-0.55 {4.1-5.6}
	Coefficient of Dynamic friction	-	0.69MPa {7kgf/cm <sup>3</sup> } 3m/min	0.10
	THERMAL	Thermal conductivity	W/(m•K) {Kcal/(m•hr•°C)}	C177
Specific Heat		J/(°C•g) {cal/(°C•g)}	-	1.05 {0.25}
Coefficient of Linear expansion		10 <sup>-5</sup> /°C	D696	10
Ball Pressure		°C	-	180
Max. Service Temperature		°C	Unloaded	260
<b>Temperature thermal deformation ratio</b>				
1.81 Mpa {18.5kgf/cm <sup>2</sup> }		°C	-	121
0.45Mpa {4.6kgf/cm <sup>2</sup> }		°C	-	121
ELECTRICAL	Volumetric resistance ratio	•cm	D257 (50%.RH.235)	>10 <sup>18</sup>
	Dielectric breakdown strength (Short term)	MV/m kV/mm(3.2mm thickness)	D149	19
	<b>Dielectric constant</b>			
	60Hz	pF/m	D150	<18.6 {<2.1}
	10 <sup>3</sup> Hz	pF/m	D150	<18.6 {<2.1}
	10 <sup>6</sup> Hz	pF/m	D150	<18.6 {<2.1}
	Anti arcing property	sec	D495	>300
	<b>Dielectric dissipation factor</b>			
	60Hz	-	D150	<0.0002
	10 <sup>3</sup> Hz	-	D150	<0.0002
10 <sup>6</sup> Hz	-	D150	<0.0002	
DURABILITY	Water absorption (24h)	%	D570	0.00
	3.2mm thickness combustibility	-	(UL/94)	V-0
	Oxygen index	-	D2863	>95
	Effect of direct sunlight	-	-	No
	Effect of weak acid	-	D543	No
	Effect of strong acid	-	D543	No
	Effect of weak alkali	-	D543	No
	Effect of strong alkali	-	D543	No
Effect of solvent alkali	-	-	No	