



# PRIOR PLASTIC CO., LTD.

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## PTFE Technical Data Sheet

PROPERTIES	Test Method	Unit	Value
<b>I . Physical Properties</b>			
Density	ISO 1183	g/cm <sup>3</sup>	2.18~2.2
Water absorption 24hrs	ISO 62	%	< 0.05
<b>II . Thermal Properties</b>			
Heat deflection temperature - HDT/A	ISO 75A	°C	-
Min. service temperature		°C	-180
Max. service temperature		°C	260
Thermal conductivity at 23 °C	DIN 11359	W/(K*m)	0.25
Coefficient of linear thermal expansion	ISO 11359	10 <sup>-4</sup> K <sup>-1</sup>	1.2
Flammability Rating(6mm thickness)	UL 94	-	V-0
<b>III.Mechanical Properties at 23°C</b>			
Tensile strength at yield	ISO 527-2	MPa	25
Tensile strength at break	ISO 527-2	Mpa	-
Elongation at break	ISO 527-2	%	50
Modulus of elasticity after tensile test	ISO 527-2	MPa	700
Modulus of elasticity after flexural test	ISO 178	MPa	-
Hardness - Shore D	DIN 53505		55
Charpy impact strength	ISO 179	kJ/m <sup>2</sup>	N. B.
Friction coefficient	DIN 53375		0.08
<b>IV. Electrical Properties at 23°C</b>			
Dielectric constant at 1 MHz	IEC 60250	10 <sup>6</sup> Hz	2.1
Dielectric loss factor at 1 MHz	IEC 60250	10 <sup>6</sup> Hz	0.0002
Volume resistivity	IEC 60093	Ohm (Ω) * cm	> 10 <sup>16</sup>
Surface resistivity	IEC 60093	Ohm (Ω)	> 10 <sup>16</sup>
Dielectric strength	IEC 60243-1	kV/mm	48
<b>NOTE: 1 g/cm<sup>3</sup> = 1,000 kg/m<sup>3</sup>, 1 Mpa = 1 N/mm<sup>2</sup>, 1kV/mm = 1 MV/m</b>			

### Statement:

Property data contained herein are typical values of resin for your reference and comparison purposes only. PRIOR will not provide any legally binding guarantee of certain properties, or any suitability.