

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	61	MPa	ISO 527
Yield strain	6	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Flexural strength	91	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	76	kJ/m <sup>2</sup>	ISO 179/1eA
<b>ASTM Data</b>			
Tensile Modulus	2120	MPa	ASTM D 638
Tensile Strength at Yield	61	MPa	ASTM D 638
Tensile Strength at Break	81	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	140	%	ASTM D 638
Compressive Strength	76	MPa	ASTM D 695
Flexural Modulus	2230	MPa	ASTM D 790
Flexural Strength	90	MPa	ASTM D 790
Rockwell Hardness	M 77	-	ASTM D 785
Izod Impact notched, 1/8 in	880	J/m	ASTM D 256
Izod Impact notched, 1/4 in	140	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	129	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	142	°C	ISO 75-1/-2
Vicat softening temperature, B	149	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thckn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Glow Wire Flammability Index (GWFI)	850	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1.5	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (2)	3	mm	-
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	70	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	70	E-6/K	ASTM D 696

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.1	-	IEC 62631-2-1

**Panlite® L-1250Y**

PC

Teijin Chemicals Ltd.

Relative permittivity, 1MHz	<b>3</b>	-	IEC 62631-2-1
Dissipation factor, 100Hz	<b>10</b>	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	<b>90</b>	E-4	IEC 62631-2-1
Volume resistivity	<b>&gt;1E13</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>&gt;1E15</b>	Ohm	IEC 62631-3-2
Electric strength	<b>30</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>250</b>	-	IEC 60112

**ASTM Data**

Dielectric Strength, Short Time	<b>30</b>	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	<b>0.0004</b>	-	ASTM D 150
Dissipation Factor, 1 MHz	<b>0.009</b>	-	ASTM D 150
Dielectric Constant, 60 Hz	<b>2.95</b>	-	ASTM D 150
Dielectric Constant, 1 MHz	<b>2.9</b>	-	ASTM D 150
Volume Resistivity	<b>3E16</b>	Ohm*cm	ASTM D 257
Arc Resistance	<b>110</b>	s	ASTM D 495

<b>Optical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Light Transmittance	<b>88</b>	%	ASTM D 1003
Index of Refraction	<b>1.58</b>	-	ASTM D 542

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1200</b>	kg/m <sup>3</sup>	ISO 1183
Water Absorption, Equilibrium	<b>0.2</b>	%	ASTM D 570

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>120</b>	°C	-
Pre-drying - Time	<b>&gt;5</b>	h	-
Melt temperature	<b>270 - 320</b>	°C	-
Mold temperature	<b>80 - 120</b>	°C	-

**Characteristics****Processing**

Injection Molding, Other Extrusion

**Delivery form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Transparent

**Applications**

General Purpose

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa