

**LUPOY HI5000U**

(PC+ABS)

LG Chem

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt flow index, MFI	10	g/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Melt Flow Index, MFI	2.8	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	2.16	kg	-
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	2000	MPa	ISO 527
Yield stress	45	MPa	ISO 527
Yield strain	4.2	%	ISO 527
Stress at break	48	MPa	ISO 527
Strain at break	100	%	ISO 527
Flexural modulus, 23°C	2230	MPa	ISO 178
Flexural strength	75	MPa	ISO 178
Charpy notched impact strength, +23°C	60 <sup>[1]</sup>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	53 <sup>[1]</sup>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	57 <sup>[1]</sup>	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	38 <sup>[1]</sup>	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-40	°C	-
Rockwell hardness	R 117	-	ISO 2039-2
<b>ASTM Data</b>			
Tensile Modulus	2228	MPa	ASTM D 638
Tensile Strength at Yield	51	MPa	ASTM D 638
Tensile Strength at Break	52	MPa	ASTM D 638
Elongation at Yield	4.2	%	ASTM D 638
Elongation at Break	128	%	ASTM D 638
Flexural Modulus	2263	MPa	ASTM D 790
Flexural Strength	85.3	MPa	ASTM D 790
Rockwell Hardness	R 117	-	ASTM D 785
Izod Impact notched, 1/8 in	736	J/m	ASTM D 256
Izod Impact notched, 1/4 in	520	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	500	J/m	ASTM D 256
Temperature	-30	°C	-

1: 4 mm

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	94 <sup>[2]</sup>	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	113 <sup>[2]</sup>	°C	ISO 75-1/-2
Vicat softening temperature, B	113	°C	ISO 306
Coeff. of linear therm. expansion, parallel	78	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	84	E-6/K	ISO 11359-1/-2
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	78	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	84	E-6/K	ASTM D 696
DTUL @ 66 psi	120 <sup>[3]</sup>	°C	ASTM D 648
DTUL @ 264 psi	104 <sup>[3]</sup>	°C	ASTM D 648
Vicat Temperature	113	°C	ASTM D 1525

2: 4 mm 3: 6.4 mm

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<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Volume resistivity	<b>1E15</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>1E15</b>	Ohm	IEC 62631-3-2
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>25</b>	kV/mm	ASTM D 149
Surface Resistivity	<b>1E15</b>	Ohm	ASTM D 257
Volume Resistivity	<b>1E17</b>	Ohm*cm	ASTM D 257

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Humidity absorption	<b>0.2</b>	%	Sim. to ISO 62
Density	<b>1110</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1110</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>80 - 100</b>	°C	-
Pre-drying - Time	<b>4 - 6</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>240 - 260</b>	°C	-
Mold temperature	<b>60 - 80</b>	°C	-
Zone 1	<b>240 - 260</b>	°C	-
Zone 2	<b>250 - 270</b>	°C	-
Zone 3	<b>250 - 270</b>	°C	-
Nozzle temperature	<b>250 - 280</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Applications**

Automotive, General Purpose

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America