LUPOY GP1000LU

PC LG Chem

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**23**	g/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Molding shrinkage, parallel	**0.7**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.7**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**23**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Mold Shrinkage, MD	**0.007**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.007**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2480**	MPa	ISO 527
Yield stress	**61**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Stress at break	**70**	MPa	ISO 527
Strain at break	**100**	%	ISO 527
Flexural modulus, 23°C	**2400**	MPa	ISO 178
Flexural strength	**92**	MPa	ISO 178
Charpy notched impact strength, +23°C	**12**[1]	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**9**[1]	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**12**[1]	kJ/m²	ISO 180/1A
Izod notched impact strength	**8**[1]	kJ/m²	ISO 180/1A
Temperature	**-40**	°C	-
Rockwell hardness	**R 118**	-	ISO 2039-2
ASTM Data			
Tensile Modulus	**2450**	MPa	ASTM D 638
Tensile Strength at Yield	**61.8**	MPa	ASTM D 638
Tensile Strength at Break	**68.7**	MPa	ASTM D 638
Elongation at Yield	**6**	%	ASTM D 638
Elongation at Break	**132**	%	ASTM D 638
Flexural Modulus	**2367**	MPa	ASTM D 790
Flexural Strength	**107**	MPa	ASTM D 790
Rockwell Hardness	**R 118**	-	ASTM D 785
Izod Impact notched, 1/8 in	**736**	J/m	ASTM D 256
Izod Impact notched, 1/4 in	**78.5**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**88.3**	J/m	ASTM D 256
Temperature	**-30**	°C	-

1: 4 mm

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**122**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**134**	°C	ISO 75-1/-2
Vicat softening temperature, B	**141**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**73**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**80**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
Thickness tested	**0.37**	mm	-
Coefficient of Thermal Expansion, MD	**73**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**80**	E-6/K	ASTM D 696
DTUL @ 66 psi	**136**	°C	ASTM D 648

DTUL @ 264 psi	**130**	°C	ASTM D 648
Vicat Temperature	**141**	°C	ASTM D 1525

Electrical properties	**Value**	**Unit**	**Test Standard**
ISO Data			
Volume resistivity	**1E15**	Ohm*m	IEC 62631-3-1
Surface resistivity	**1E15**	Ohm	IEC 62631-3-2
Comparative tracking index	**325**	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	**20**	kV/mm	ASTM D 149
Surface Resistivity	**1E15**	Ohm	ASTM D 257
Volume Resistivity	**1E17**	Ohm*cm	ASTM D 257

Other properties	**Value**	**Unit**	**Test Standard**
Humidity absorption	**0.2**	%	Sim. to ISO 62
Density	**1200**	kg/m³	ISO 1183
Density	**1200**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**100 - 120**	°C	-
Pre-drying - Time	**3 - 5**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**300 - 320**	°C	-
Mold temperature	**80 - 120**	°C	-
Zone 1	**260 - 280**	°C	-
Zone 2	**280 - 300**	°C	-
Zone 3	**300 - 320**	°C	-
Nozzle temperature	**300 - 320**	°C	-

Characteristics

Processing
Injection Molding

Applications
Automotive, Electrical and Electronical, General Purpose

Special Characteristics
U.V. stabilized or stable to weather

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