## Lupoy® GP5100

## Polycarbonate + ABS

LG Chem Ltd.

## Message:

Lupoy® GP5100 is a Polycarbonate + ABS (PC+ABS) material filled with 10% glass fiber. It is available in Asia Pacific, Europe, Latin America, or North America for injection molding. Typical applications include: Automotive Electrical/Electronic Applications Housings

UL VellowCardEG1711-248451E248280-322217Filler / ReinforcementGlass Fiber 10% Filler by WeightFeaturesGeneral PurposeUsesAutomotive Instrument PanelElectrical Housing Electrical/Electronic Applications General PurposeProcessing MethodInjection MoldingProcessing MethodInjection MoldingPhysicalNominal ValueUnitTest Methodg/cm³ASTM D792Methoss-Flow Rate (MFR) (250°C/216 Kg)4.0g/10 minASTM D793Methodss-Flow Rate (MFR) (250°C/216 Kg)0.30 to 0.40%ASTM D793Method0.30 to 0.40%ASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D638Tensile Elengation 2 (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus 3 (3.20 mm)6.0%ASTM D638Flexural Modulus 4 (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotchel Izod Impact (37°C, 3.20 mm)98//mASTM D55ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (18 MPa, Unannealed, 6.40 mm)Nominal ValueUnitMereinS.00 o 9.0//mASTM D56ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (18 MPa, Unannealed, 6.40 mm)Nominal ValueUnitMPa, Unannealed, 6.40 mm)121"CASTM D648MPa, Unannealed, 6.40 mm)121	General Information			
Features General Purpose   Uses Automotive Instrument Panel   Electrical Housing Electrical Housing   Electrical/Electronic Applications General Purpose   Processing Method Injection Molding   Physical Nominal Value Unit   Specific Gravity 1.16 to 1.20 g/Cm <sup>3</sup> ASTM D723   Melt Mass-Flow Rate (MFR) (250°C/2.16) 4.0 g/10 min ASTM D723   Melding Strinkage - Flow (3.20 mm) 0.30 to 0.40 %0 ASTM D723   Melding Strinkage - Flow (3.20 mm) 0.30 to 0.40 %0 ASTM D536   Melding Strinkage - Flow (3.20 mm) 6.0 %1 ASTM D638   Tensile Elengnation <sup>2</sup> (Break, 3.20 mm) 8.8.3 MPa ASTM D638   Reural Modulus <sup>3</sup> (3.20 mm) 6.0 %1 ASTM D638   Flexural Modulus <sup>3</sup> (3.20 mm) 8.9 MPa ASTM D638   Reural Modulus <sup>3</sup> (3.20 mm) 107 Method Mominal Value   Inpact Nominal Value Non ASTM D638   Reural Modulus <sup>3</sup> (3.20 mm) 137 Method ASTM D638   Method Inpact (2.3°C, 3.20 mm) 121 <td>UL YellowCard</td> <td>E67171-248451</td> <td>E248280-322217</td> <td></td>	UL YellowCard	E67171-248451	E248280-322217	
UsesAutomotive Instrument Panel Electrical Housing Electrical/Electronic Applications General PurposeProcessing MethodInjection MoldingPhysicalNominal ValueUnitPhysicalInite 120gron <sup>7</sup> Specific Gravity1.16 to 1.20gron <sup>7</sup> Methodjoron <sup>7</sup> ASTM D792Methodjoron <sup>7</sup> ASTM D792Moling Shrinkage - Flow (3.20 m)0.30 to 4.04% 10MethodMominal ValueUnitTensile Strength <sup>1</sup> (rield, 3.20 mm)8.3.3MPaAstm D638MPaASTM D638Tensile Strength <sup>1</sup> (rield, 3.20 mm)6.0% PaMethodulus <sup>3</sup> (3.20 mm)6.0% PaMorinal ValueUnitASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)137MPaMarcent <sup>2</sup> (Streak, 3.20 mm)137MPaMorinal ValueUnitTest MethodImpactNominal ValueUnitImpactNominal ValueUnitPresural Strength <sup>4</sup> (3.20 mm)121°CMorinal ValueUnitTest MethodImpactNominal ValueUnitNotinal ValueUnitStrength ContMelection Temperature Under Load (1.8)121°CMarcent Temperature Under Load (1.8)Strin D648InjectionNominal ValueUnitMing TemperatureSto 0.5.0NitMing Temperature0.020%Sto 25.0NitSto 25.0Marcent TemperatureSto 26.0 <t< td=""><td>Filler / Reinforcement</td><td>Glass Fiber,10% Filler by Weight</td><td></td><td></td></t<>	Filler / Reinforcement	Glass Fiber,10% Filler by Weight		
Betrial Housing Betria/Electronic Applications' cional VersoesProcessing Methodincton degressionProcessing Methodincton MoltingProcessing Methodincton MoltingProcessing Methodincton ConstraintSpecific Gravityincton 2000Methods-Flow Rate (MFR) (250°C)incton 2000Molting Strinkage - Flow Rate (MFR) (250°C)incton 2000Methods-Flow Rate (MFR) (250°C)incton 2000Methods-Flow Rate (MFR) (250°C)incton 2000Methods-Flow Rate (MFR) (250°C)incton 2000Methods-Flow Rate (MFR) (250°C)incton 2000Methods (250°C)incton 2000Metho	Features	General Purpose		
Betria/Electronic Applications General PurposeProcessing MethodInjetion MoldingProcessing MethodNominal ValueUnitPhysicalNominal ValueInitSpecific Cavity1.6 to 1.20g/m <sup>2</sup> Meth Mass-Flow Rate (MFR) (2007)3.0 to 0.40%10Molding Shrinkage - Flow (3.0 com)0.30 to 0.40%10Moding Shrinkage - Flow (3.0 com)0.30 to 0.40%10Methanson0.30 to 0.40%10Molto Stati Molto Sta	Uses	Automotive Instrument Panel		
General Purpose   Processing Method Injection Molding   Physical Nominal Value Unit Test Method   Specific Gravity 1.16 to 1.20 g/cm <sup>3</sup> ASTM D792   Melt Mass-Flow Rate (MFR) (250°C/2.16) 4.0 g/10 min ASTM D792   Molding Shrinkage - Flow (3.20 mm) 0.30 to 0.40 %0 ASTM D955   Mechanical Nominal Value Unit Test Method   Mechanical Nominal Value MPa ASTM D955   Tensile Strength <sup>1</sup> (Yield, 3.20 mm) 8.8.3 MPa ASTM D638   Flexural Modulus <sup>3</sup> (2.20 mm) 6.0 %0 ASTM D638   Flexural Modulus <sup>3</sup> (3.20 mm) 6.0 MPa ASTM D638   Flexural Strength <sup>4</sup> (3.20 mm) 6.0 MPa ASTM D638   Inpact Mominal Value MPa ASTM D638   Nothed Izod Impact (3° Gram) 101 Test Method   Nothed Izod Impact (3° Log Dm) 98 Jinta Test Method   Nothed Izod Impact (3° Gram) 101 Test Method Test Method   MPa, Unanneeled, 6.40 mm) 121 C Sti M D638 <td></td> <td>Electrical Housing</td> <td></td> <td></td>		Electrical Housing		
Processing MethodInjection MoldingPhysicalNominal ValueUnitTest MethodSpecific Gravity16 to 1.20Orm <sup>3</sup> ASTM D792Melt Mass-Flow Rate (MFR) (250°C/L) (8)4.0g/10 minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)8.8.3MPaASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)6.0%ASTM D638Plexural Modulus <sup>3</sup> (3.20 mm)6.0%PaASTM D790Flexural Modulus <sup>3</sup> (3.20 mm)137MPaASTM D790TippactNominal ValueUnitTest MethodNotched Izod Impact (2 <sup>3</sup> C, 3.20 mm)8J/mASTM D790Plexural Strength <sup>4</sup> (3.20 mm)121CASTM D790TippactNominal ValueUnitTest MethodNotched Izod Impact (2 <sup>3</sup> C, 3.20 mm)8J/mASTM D256ThermalNominal ValueUnitTest MethodDeficition Temperature Under Load (18) MPA, Unannealed, 6.40 mm)121CASTM D648InjectionNominal ValueUnitTest MethodDrying TemperatureSto 19.50CTTDrying Time3.0 to 5.0CTTStoggested Max Moisture0.020%TTStog 20.2010.20%TTStog 20.2010.20%TTStoggested Max Moisture<		Electrical/Electronic Applications		
PhysicalNominal ValueUnitTest MethodSpecific Gravity1.16 to 1.20g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)4.0g/10 minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Strength <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)98J/mASTM D790InpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Time3.0 to 5.0°CDrying Time0.020%Suggested Max Moisture0.020°C°C.Rear Temperature220 to 240°C°C.		General Purpose		
PhysicalNominal ValueUnitTest MethodSpecific Gravity1.16 to 1.20g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)4.0g/10 minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Strength <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)98J/mASTM D790InpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Time3.0 to 5.0°CDrying Time0.020%Suggested Max Moisture0.020°C°C.Rear Temperature220 to 240°C°C.				
Specific Gravity1.16 to 1.20g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)4.0g/10 minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Islongation <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Time3.0 to 5.0°CDrying Time3.0 to 5.0%Suggested Max Moisture0.20%Rear Temperature2.0 to 240°C	Processing Method	Injection Molding		
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)4.0g/10 minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Elongation <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPA, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Temperature85.0 to 95.0°C"CDrying Time3.0 to 5.0hr:-Suggested Max Moisture0.020%:-Rea Temperature20 to 240"C:-	Physical	Nominal Value	Unit	Test Method
kg)4.0g/10minASTM D1238Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D555MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)8.3MPaASTM D638Tensile Flongatio <sup>2</sup> (Break, 3.20 mm)6.0MPaASTM D738Flexural Modulus <sup>3</sup> (3.20 mm)9000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790InpactNominal ValueMPaASTM D790Notched Izod Impact (3.27, 3.20 mm)98MotTest MethodNominal ValueUnitTest MethodPaffection Temperature Under Lood (3.12)121CaASTM D648MpA, Unannealed, 6.40 mm)121CaASTM D648Injost TemperatureSoto 95.0Nc-Dying Temperature0.020%Dying Time0.020%Suggested Max Moisture0.020%Que temperature2010.200%Remember2010.200%Suggested Max Moisture2010.200%Remember2010.200%Remember2010.200%Suggested Max Moisture2010.200%Remember2010.200%Suggested Max Moisture2010.200%Remember2010.200% <td>Specific Gravity</td> <td>1.16 to 1.20</td> <td>g/cm³</td> <td>ASTM D792</td>	Specific Gravity	1.16 to 1.20	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.20 mm)0.30 to 0.40%ASTM D955MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Elongation <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Inpact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrSSuggested Max Moisture0.020%SRear Temperature20 to 240°C		4.0	q/10 min	ASTM D1238
MechanicalNominal ValueUnitTest MethodTensile Strength <sup>1</sup> (Yield, 3.20 mm)88.3MPaASTM D638Tensile Elongation <sup>2</sup> (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Temperature85.0 to 95.0°CSTM D648Drying Time3.0 to 5.0hrSTM D54Suggested Max Moisture0.020%STM D54Rear Temperature20 to 240°CSTM D54		0.30 to 0.40	-	ASTM D955
Tensile Elongation 2 (Break, 3.20 mm)6.0%ASTM D638Flexural Modulus 3 (3.20 mm)49000MPaASTM D790Flexural Strength 4 (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPA, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying TemperatureMS.0 v 95.0°C*CDrying Time3.0 v 5.0%*CSuggested Max Moisture0.20%*CRear Temperature22 to 240°C		Nominal Value	Unit	Test Method
Flexural Modulus <sup>3</sup> (3.20 mm)49000MPaASTM D790Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying TemperatureS.0 to 95.0°C°CDrying Time3.0 to 5.0%C·CSuggested Max Moisture0.020%C·CRear Temperature220 to 240°C·C	Tensile Strength <sup>1</sup> (Yield, 3.20 mm)	88.3	MPa	ASTM D638
Flexural Strength <sup>4</sup> (3.20 mm)137MPaASTM D790ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitTest MethodDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0N-Suggested Max Moisture0.020%-Rear Temperature22 to 240°C-	Tensile Elongation <sup>2</sup> (Break, 3.20 mm)	6.0	%	ASTM D638
ImpactNominal ValueUnitTest MethodNotched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitUnitDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrCSuggested Max Moisture0.020%CRear Temperature220 to 240°CC	Flexural Modulus <sup>3</sup> (3.20 mm)	49000	MPa	ASTM D790
Notched Izod Impact (23°C, 3.20 mm)98J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPA, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitCDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrCSuggested Max Moisture0.020%CRear Temperature20 to 240°C	Flexural Strength <sup>4</sup> (3.20 mm)	137	MPa	ASTM D790
ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitCDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrCSuggested Max Moisture0.020%CRear Temperature20 to 240°CC	Impact	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitCDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrCSuggested Max Moisture0.020%CRear Temperature20 to 240°CC	Notched Izod Impact (23°C, 3.20 mm)	98	J/m	ASTM D256
MPa, Unannealed, 6.40 mm)121°CASTM D648InjectionNominal ValueUnitCDrying Temperature85.0 to 95.0°CCDrying Time3.0 to 5.0hrCSuggested Max Moisture0.020%CRear Temperature20 to 240°CC	Thermal	Nominal Value	Unit	Test Method
Drying Temperature85.0 to 95.0°CDrying Time3.0 to 5.0hrSuggested Max Moisture0.020%Rear Temperature220 to 240°C		121	°C	ASTM D648
Drying Time3.0 to 5.0hrSuggested Max Moisture0.020%Rear Temperature220 to 240°C	Injection	Nominal Value	Unit	
Suggested Max Moisture0.020%Rear Temperature220 to 240°C	Drying Temperature	85.0 to 95.0	°C	
Rear Temperature 220 to 240 °C	Drying Time	3.0 to 5.0	hr	
	Suggested Max Moisture	0.020	%	
Middle Temperature 235 to 255 °C	Rear Temperature	220 to 240	°C	
	Middle Temperature	235 to 255	°C	

Front Temperature	250 to 265	°C
Nozzle Temperature	250 to 265	°C
Processing (Melt) Temp	235 to 265	°C
Mold Temperature	50.0 to 80.0	°C
Back Pressure	0.0196 to 0.0588	MPa
Screw Speed	40 to 70	rpm
NOTE		
1.	5.0 mm/min	
2.	5.0 mm/min	
3.	1.3 mm/min	
4.	1.3 mm/min	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

