



Lupoy® GN1002FS
 LG Chem Ltd. - Polycarbonate

Friday, May 24, 2019

General Information

Product Description

Description
 Halogen Free Flame Retardant, High Impact
 Chemical Resistance

Application
 IT/OA (M/P Battery Housing)

General

Material Status	• Commercial: Active	
Availability	• Asia Pacific • Europe	• Latin America • North America
Additive	• Flame Retardant	
Features	• Chemical Resistant • Flame Retardant	• Halogen Free • High Impact Resistance
Uses	• Electrical/Electronic Applications • Housings	
Processing Method	• Injection Molding	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow (23°C, 3.20 mm, Injection Molded)	0.50 to 0.80	%	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ²			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	61.8	MPa	
Tensile Elongation ²			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	> 100	%	
Flexural Modulus ³ (23°C, 3.20 mm, Injection Molded)	2280	MPa	ASTM D790
Flexural Strength ³ (23°C, 3.20 mm, Injection Molded)	93.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm, Injection Molded)	690	J/m	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	117		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	112	°C	
RTI Elec	80.0	°C	UL 746
RTI Imp	80.0	°C	UL 746
RTI Str	80.0	°C	UL 746

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm		V-0	
2.0 mm	•	V-0	
	•	5VB	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	90 to 100	°C
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	270 to 285	°C
Middle Temperature	275 to 290	°C
Front Temperature	275 to 290	°C
Nozzle Temperature	270 to 285	°C
Processing (Melt) Temp	275 to 290	°C
Mold Temperature	80 to 100	°C
Back Pressure	0.981 to 3.92	MPa
Screw Speed	40 to 80	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 50 mm/min

³ 15 mm/min