

General Information
Product Description

Description
Halogen Free Flame Retardant, Transparency, Mold Release

Application
IT/OA, Electric & Electronic Housing and Components

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Flame Retardant • Good Mold Release • Halogen Free
Uses	• Electrical/Electronic Applications
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

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)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70	%	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, 3.20 mm)	61.8	MPa	ASTM D638
Tensile Elongation ² (Break, 3.20 mm)	100	%	ASTM D638
Flexural Modulus ³ (3.20 mm)	2260	MPa	ASTM D790
Flexural Strength ³ (Yield, 3.20 mm)	91.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm)	720	J/m	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ⁴ 0.45 MPa, Unannealed, 6.40 mm	130	°C	ASTM D648
Vicat Softening Temperature	141	°C	ASTM D1525 ⁵
RTI Elec	120	°C	UL 746
RTI Imp	110	°C	UL 746
RTI Str	120	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (CTI)	PLC 3		UL 746

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Lupoy® GN1006FMR
LG Chem Ltd. - Polycarbonate

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm		V-2	
2.0 mm		V-1	
2.5 mm		V-0	
3.0 mm		V-0	
Optical	Nominal Value	Unit	Test Method
Transmittance	87.0	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	100 to 200	°C
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	< 0.020	%
Rear Temperature	260 to 280	°C
Middle Temperature	280 to 300	°C
Front Temperature	300 to 320	°C
Nozzle Temperature	300 to 320	°C
Processing (Melt) Temp	300 to 320	°C
Mold Temperature	80 to 120	°C
Back Pressure	0.981 to 3.92	MPa
Screw Speed	40 to 70	rpm

Notes

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

² 50 mm/min

³ 10 mm/min

⁴ 18.6kg

⁵ Rate A (50°C/h), Loading 2 (50 N)