

General Information
Product Description

 Description
 Light diffusion

 Application
 (LED) Lamp cover, Signboard Lighting decoration of electronic device

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Asia Pacific • Europe • Latin America • North America
Features	• Good Light Diffusion
Uses	<ul style="list-style-type: none"> • Electrical/Electronic Applications • Lighting Applications • Lighting Diffusers • Lighting Fixtures
Processing Method	<ul style="list-style-type: none"> • Extrusion • 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)	3.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.80	%	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 (6.40 mm)	2260	MPa	ASTM D790
Flexural Strength ³ (6.40 mm)	93.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.20 mm)	780	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 1.8 MPa, Unannealed, 6.40 mm	125	°C	ASTM D648
CLTE - Flow	6.8E-5	cm/cm/°C	ASTM D696
RTI Elec	80.0	°C	UL 746
RTI Imp	80.0	°C	UL 746
RTI Str	80.0	°C	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.6 mm)	V-0		UL 94
Optical	Nominal Value	Unit	Test Method
Transmittance (1000 μm)	85.0	%	JIS K7361

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.

Lumiplas® LD7000FS

LG Chem Ltd. - Polycarbonate

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	100 to 120	°C
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	260 to 280	°C
Middle Temperature	280 to 300	°C
Front Temperature	290 to 310	°C
Nozzle Temperature	290 to 310	°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
Extrusion	Nominal Value	Unit
Drying Temperature	100 to 120	°C
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	260 to 280	°C
Cylinder Zone 2 Temp.	270 to 300	°C
Cylinder Zone 3 Temp.	270 to 300	°C
Cylinder Zone 4 Temp.	270 to 300	°C
Adapter Temperature	280 to 300	°C
Melt Temperature	300 to 320	°C
Die Temperature	260 to 295	°C

Extrusion Notes

- Roll Stack Temperature - Top: 120 to 150°C
- Roll Stack Temperature - Middle: 120 to 150°C
- Roll Stack Temperature - Bottom: 120 to 150°C

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 50 mm/min
- ³ 15 mm/min