

Lumid® GP1100AW

Polyamide 6
LG Chem Ltd.

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

General Purpose

Application
Automotive Parts

Material Type
PA6

General

Material Status	• Commercial: Active
UL Yellow Card ¹	• E248280-100040914
Search for UL Yellow Card	• LG Chem Ltd. • Lumid®
Availability	• Asia Pacific • Europe • Latin America • North America
Uses	• Automotive Applications • General Purpose

Physical	Nominal Value Unit	Test Method
Density (23°C)	1.13 g/cm ³	ISO 1183
Molding Shrinkage - Flow (3.20 mm)	1.0 to 1.4 %	ASTM D955
Water Absorption (24 hr, 23°C, 50% RH)	1.7 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		
Yield, 3.20 mm ³	79.4 MPa	ASTM D638
Break	72.0 MPa	ISO 527-2/50
Tensile Elongation		
Break, 3.20 mm ³	100 %	ASTM D638
Break	> 80 %	ISO 527-2/50
Flexural Modulus		
6.40 mm ⁴	2650 MPa	ASTM D790
-- ⁵	2600 MPa	ISO 178
Flexural Strength		
6.40 mm ⁴	108 MPa	ASTM D790
-- ⁵	110 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0 kJ/m ²	ISO 179
Notched Izod Impact (23°C, 6.40 mm)	49 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	120	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed	170 °C	ASTM D648
0.45 MPa, Unannealed	168 °C	ISO 75-2/Bf
1.8 MPa, Unannealed	60.0 °C	ASTM D648 ISO 75-2/Af
Vicat Softening Temperature	191 °C	ISO 306/B50
Peak Melting Temperature	220 °C	ASTM D3418 ISO 3146
CLTE - Flow	8.0E-5 cm/cm/°C	ASTM D696



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Electrical	Nominal Value Unit	Test Method
Volume Resistivity (23°C)	1.0E+17 ohms·cm	ASTM D257
Dielectric Strength (23°C, 1.00 mm)	19 kV/mm	ASTM D149
Dielectric Constant (23°C, 1.00 GHz)	3.00	ASTM D150

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.5 mm	V-2	
3.0 mm	V-2	

Injection	Nominal Value Unit
Drying Temperature	80 to 100 °C
Drying Time	4.0 to 5.0 hr
Rear Temperature	225 to 245 °C
Middle Temperature	230 to 260 °C
Front Temperature	240 to 270 °C
Nozzle Temperature	240 to 270 °C
Processing (Melt) Temp	240 to 270 °C
Mold Temperature	60 to 80 °C

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ 2.8 mm/min

⁵ 2.0 mm/min



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Where to Buy

Supplier

LG Chem Ltd.

Englewood Cliffs, Englewood Cliffs USA

Telephone: 201-816-2302

Web: <http://www.chemwide.com/>

Distributor

Chase Plastic Services, Inc.

Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: <http://www.chaseplastics.com/contact/locations>

www.chaseplastics.com/contact/locations

Telephone: 800-232-4273

Web: <http://www.chaseplastics.com/>

Availability: North America

Conventus Polymers

Telephone: 973-343-7669

Web: <http://www.conventuspolymers.com/>

Availability: North America

Resin Resource, Inc.

Telephone: 877-652-3431

Web: <http://www.resinresourceinc.com/>

Availability: North America

