

LG PMMA IG840

Polymethyl Methacrylate Acrylic
LG MMA Corp.

Technical Data

Product Description

General purpose grade of PMMA is largely divided into injection and extrusion purpose. Various pellet type of grades fit for the properties of customer products are available.

General

Material Status	• Commercial: Active	
Literature ¹	• Processing - LG PMMA (English) • Technical Datasheet (English)	
UL Yellow Card ²	• E67171-248632	
Availability	• Asia Pacific • Europe	• Latin America • North America
Features	• General Purpose	
Uses	• General Purpose	
RoHS Compliance	• RoHS Compliant	
UL File Number	• E194507	
Appearance	• Clear/Transparent	
Forms	• Pellets	
Processing Method	• Extrusion	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.18 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	5.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.20 to 0.50 %	ASTM D955
Water Absorption (24 hr)	0.30 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	66.7 MPa	ASTM D638
Tensile Elongation (Yield)	8.0 %	ASTM D638
Flexural Modulus	3300 MPa	ASTM D790
Flexural Strength (Yield)	133 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact	15 J/m	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	96	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	89.0 °C	ASTM D648
Vicat Softening Temperature	109 °C	ASTM D1525 ⁴
CLTE - Flow	0.000060 cm/cm/°C	ASTM D696
RTI Elec (1.50 mm)	50.0 °C	UL 746
RTI Imp (1.50 mm)	50.0 °C	UL 746
RTI Str (1.50 mm)	50.0 °C	UL 746

Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
--	HB	
1.50 mm, All	HB	

Optical	Nominal Value Unit	Test Method
Refractive Index	1.490	ASTM D542
Transmittance (3000 µm)	92.0 %	ASTM D1003
Haze (3000 µm)	0.50 %	ASTM D1003
Yellowness Index (3.00 mm)	0.40 YI	ASTM D1925

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Injection	Nominal Value Unit
Drying Temperature	70.0 to 80.0 °C
Drying Time	4.0 to 6.0 hr
Suggested Max Moisture	0.10 %
Rear Temperature	210 to 250 °C
Middle Temperature	210 to 250 °C
Front Temperature	210 to 250 °C
Mold Temperature	70.0 to 80.0 °C
Injection Pressure	78.5 to 147 MPa

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES 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.

³ Typical properties: these are not to be construed as specifications.

⁴ Loading 1 (10 N)

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Where to Buy

Supplier

LG MMA Corp.

, Korea

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

Distributor

Biesterfeld Plastic GmbH

Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.

Telephone: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

Availability: Algeria, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Ireland, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Turkey, United Kingdom

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>

Telephone: 800-232-4273

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

Availability: North America

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

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

Availability: Europe

Telko Oy

Telko Oy is a Pan European distribution company. Contact Telko Oy for availability of individual products by country.

Telephone: +358-9-5211

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

Availability: Belarus, Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Russian Federation, Sweden, Ukraine



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Prospector Plastics Database - www.ides.com/prospector

Prospector is a searchable online database that includes 85,000 data sheets from 875 manufacturers and 44,000 UL yellow cards. Each data sheet includes property, processing and supplier contact information. Prospector is relied on by nearly 400,000 design engineers and plastics processors. Using Prospector, they save time with plastic material selection by quickly and easily referencing technical information critical to the success of their products.

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– Birgit Elvardt Bader, Production Manager, Micotron

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Alternative Resins Search – find replacement plastics within minutes.

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Material Data Management – www.ides.com/datasheets

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"With UL IDES data services, our website now displays the most current information on the products we distribute and links to our backend RFQ and sales order system, adding both value and service for our customers."

– Kevin Chase, Owner & President, Chase Plastics



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