

LG PMMA IF850

Polymethyl Methacrylate Acrylic

LG MMA Corp.

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Technical Data

Product Description

LG PMMA IF850 is a Polymethyl Methacrylate Acrylic material. It is available in Asia Pacific, Europe, Latin America, or North America for injection molding.

Important attributes of LG PMMA IF850 are:

- Flame Rated
- RoHS Compliant
- High Flow

General

Material Status	• Commercial: Active
Literature ¹	• Processing - LG PMMA (English) • Technical Datasheet (English)
UL Yellow Card ²	• E67171-248630 • E194507-227599
Search for UL Yellow Card	• LG MMA Corp.
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• High Flow
Uses	• General Purpose
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.18 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	12 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.20 to 0.60 %	ASTM D955
Water Absorption (24 hr)	0.30 %	ASTM D570

Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	62.8 MPa	ASTM D638
Tensile Elongation (Yield)	10 %	ASTM D638
Flexural Modulus	3300 MPa	ASTM D790
Flexural Strength (Yield)	126 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength	1.4 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	15 kJ/m ²	ISO 179/1eU
Notched Izod Impact (Area)	1.50 kJ/m ²	ASTM D256

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	91	ASTM D785

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	86.0 °C	ASTM D648
Vicat Softening Temperature	99.0 °C	ASTM D1525 ⁴
CLTE - Flow	6.0E-5 cm/cm/°C	ASTM D696

Electrical	Nominal Value Unit	Test Method
Volume Resistivity	> 1.0E+15 ohms·cm	ASTM D257
Dielectric Strength ⁵	20 kV/mm	ASTM D149
Dielectric Constant (60 Hz)	3.10	ASTM D150
Dissipation Factor (60 Hz)	0.050	ASTM D150

Flammability	Nominal Value Unit	Test Method
Flame Rating	HB	UL 94



Optical	Nominal Value Unit	Test Method
Refractive Index	1.490	ASTM D542
Transmittance (3200 µm)	92.0 %	ASTM D1003
Haze (3200 µm)	< 0.100 %	ASTM D1003

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 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.
- ³ Typical properties: these are not to be construed as specifications.
- ⁴ Loading 1 (10 N)
- ⁵ 4000 V/sec

