Polymethyl Methacrylate Acrylic

Technical Data

Product Description

LG PMMA IH830 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 IH830 are:

- •Flame Rated
- •RoHS Compliant

Typical application of LG PMMA IH830: Automotive

General			
Material Status	•Commercial: Active		
Literature 1	Processing - LG PMMA (English)Technical Datasheet (English)		
UL Yellow Card 2	•E67171-248633		
Availability	•Asia Pacific •Europe	Latin AmericaNorth America	
Features	•General Purpose		
Uses	•General Purpose		
RoHS Compliance	•RoHS Compliant		
Processing Method	 Injection Molding 		

Physical	Nominal ValueUnit	Test Method
Density / Specific Gravity	1.18g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	2.3g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.20 to 0.60%	ASTM D955
Water Absorption (24 hr)	0.30%	ASTM D570
Mechanical	Nominal ValueUnit	Test Method
Tensile Strength (Yield)	70.6MPa	ASTM D638
Tensile Elongation (Yield)	13%	ASTM D638
Flexural Modulus	3410MPa	ASTM D790
Flexural Strength (Yield)	135MPa	ASTM D790
Impact	Nominal ValueUnit	Test Method
Charpy Notched Impact Strength	1.4kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength	15kJ/m²	ISO 179/1eU
Notched Izod Impact (Area)	1.50kJ/m²	ASTM D256
Hardness	Nominal ValueUnit	Test Method
Rockwell Hardness (M-Scale)	98	ASTM D785
Thermal	Nominal ValueUnit	Test Method
Deflection Temperature Under Load		ASTM D648 ASTM D1525 4
1.8 MPa, Unannealed	101°C	ASTM D1525 4 ASTM D696
Vicat Softening Temperature	114°C	ASTM D090
CLTE - Flow	6.0E-5cm/cm/°C	
Electrical	Nominal ValueUnit	Test Method
Volume Resistivity	> 1.0E+15ohms·cm	ASTM D257
Dielectric Strength 5	20kV/mm	ASTM D149
Dielectric Constant (60 Hz)	3.10	ASTM D150
Dissipation Factor (60 Hz)	0.050	ASTM D150
Flammability	Nominal ValueUnit	Test Method
Flame Rating	НВ	UL 94
Optical	Nominal ValueUnit	Test Method
Refractive Index	1.490	ASTM D542
Transmittance (3200 µm)	92.0 %	ASTM D1003
Haze (3200 µm)	< 0.10%	ASTM D1003
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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