

Technical Data

Product Description

Description
Halogen Free Flame Retardant, Transparency

Application
IT/OA, Electric & Electronic Housing and Components

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
UL Yellow Card ²	• E67171-248606 • E248280-533904 • E353371-101107270 • E302314-100879661 • E67171-103586650
Search for UL Yellow Card	• LG Chem Ltd. • Lupoy®
Availability	• Asia Pacific • Europe • Latin America • North America
Additive	• Flame Retardant
Features	• Flame Retardant • Halogen Free
Uses	• Electrical Housing • Electrical/Electronic Applications
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.21	1.21 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	22 g/10 min	22 g/10 min	ASTM D1238
Molding Shrinkage - Flow			ASTM D955
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ⁴			ASTM D638
Yield, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	8960 psi	61.8 MPa	
Tensile Elongation ⁴			ASTM D638
Break, 73°F (23°C), 0.126 in (3.20 mm), Injection Molded	100 %	100 %	
Flexural Modulus ⁵			ASTM D790
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	327000 psi	2260 MPa	
Flexural Strength ⁵			ASTM D790
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	14200 psi	98.1 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	13 ft·lb/in	690 J/m	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness			ASTM D785
R-Scale, 73°F (23°C), Injection Molded	118	118	



Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.252 in (6.40 mm), Injection Molded	266 °F	130 °C	ASTM D648
Vicat Softening Temperature	286 °F	141 °C	ASTM D1525 ⁶
RTI Elec	248 °F	120 °C	UL 746
RTI Imp	230 °F	110 °C	UL 746
RTI Str	248 °F	120 °C	UL 746
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm)	V-2	V-2	
0.10 in (2.5 mm), WT,RD,BK	V-0	V-0	
0.12 in (3.0 mm)	V-0	V-0	

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	212 to 248 °F	100 to 120 °C
Drying Time	3.0 to 5.0 hr	3.0 to 5.0 hr
Suggested Max Moisture	0.020 %	0.020 %
Rear Temperature	500 to 536 °F	260 to 280 °C
Middle Temperature	536 to 572 °F	280 to 300 °C
Front Temperature	572 to 608 °F	300 to 320 °C
Nozzle Temperature	572 to 608 °F	300 to 320 °C
Processing (Melt) Temp	572 to 608 °F	300 to 320 °C
Mold Temperature	176 to 248 °F	80 to 120 °C
Back Pressure	142 to 569 psi	0.981 to 3.92 MPa
Screw Speed	40 to 70 rpm	40 to 70 rpm

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 2.0 in/min (50 mm/min)

⁵ 0.39 in/min (10 mm/min)

⁶ Rate A (50°C/h), Loading 2 (50 N)

