

LEXANT™ FR RESIN LGK4010

DESCRIPTION

LGK4010 is based on Polycarbonate containing 10% of glass fiber and glass flakes. Added feature includes Dimensional Stability and Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Electrical and Electronics	Mobile Phone - Computer - Tablets, Lighting
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	99	MPa	SABIC - Japan Method
Tensile Strain, break	3 – 5	%	SABIC - Japan Method
Flexural Stress	156	MPa	ASTM D790
Flexural Modulus	6860	MPa	ASTM D790
Hardness, Rockwell M	91	-	ASTM D785
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	78	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D648
CTE, -30°C to 30°C	0.00003 – 0.000053	1 /°C	TMA
Relative Temp Index, Elec ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	80	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	80	°C	UL 746B
PHYSICAL ⁽¹⁾			
Specific Gravity	1.53	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.14	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm ⁽³⁾	0.2 – 0.25	%	SABIC method
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E45587-236910	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article. The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

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