

LEXAN™ FR RESIN SLDM2005

DESCRIPTION

LEXAN SLDM2005 compound is based on Polycarbonate (PC) containing proprietary fillers. Added features of this grade include Permanently Anti-Static, Non-Halogenated Flame Retardant

GENERAL INFORMATION	
Features	Flame Retardant, Antistatic, Non Cl/Br flame retardant
Fillers	Proprietary Filler
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	54	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	72	%	ASTM D638
Tensile Modulus, 5 mm/min	2830	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	84	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2350	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	53	MPa	ISO 527
Tensile Stress, break, 5 mm/min	46	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	46	%	ISO 527
Tensile Modulus, 1 mm/min	2600	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	88	MPa	ISO 178
Flexural Modulus, 2 mm/min	2630	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	294	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	99	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Specific Gravity	1.25	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.4 – 0.6	%	SABIC method
Melt Flow Rate, 260°C/2.16 kgf	17	g/10 min	ASTM D1238
Water Absorption, (23°C/saturated)	0.6	%	ISO 62-1

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	5.E+12	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽⁴⁾			
UL Yellow Card Link	E207780-228455	-	-
UL Recognized, 94V-2 Flame Class Rating	≥2	mm	UL 94
INJECTION MOLDING ⁽⁵⁾			
Drying Temperature	90 – 100	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	240 – 260	°C	
Nozzle Temperature	230 – 260	°C	
Front - Zone 3 Temperature	230 – 260	°C	
Middle - Zone 2 Temperature	220 – 255	°C	
Rear - Zone 1 Temperature	220 – 245	°C	
Mold Temperature	30 – 70	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.38 – 0.76	mm	

- (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) 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.
- (3) Measurement meets requirements as specified in ASTM D4496.
- (4) 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.
- (5) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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