

LNP Lexan® SML5750 Polycarbonate, 50% Glass Bead / Glass Fiber Reinforced (discontinued **)

Categories: [Polymer](#); [Thermoplastic](#); [Filled/Reinforced Thermoplastic](#); [Polycarbonate](#); [Polycarbonate, 50% Glass Filled](#)

Material Notes: 270F HDT. Will be commercialized as LGB5030N.

- Forms: Pellets
- Processing Method: Injection Molding

Information provided by LNP, a GE Plastics Company.

This data sheet is labeled Discontinued; however many LNP grades are still active under new names instituted after the SABIC purchase.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	1.63 g/cc	1.63 g/cc	ASTM D792

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	145 MPa	21000 psi	Type I, 5 mm/min; ASTM D638
Tensile Strength, Yield	124 MPa	18000 psi	Type I, 5 mm/min; ASTM D638
Elongation at Break	5.00 %	5.00 %	Type I, 5 mm/min; ASTM D638
Elongation at Yield	4.90 %	4.90 %	Type I, 5 mm/min; ASTM D638
Tensile Modulus	11.0 GPa	1600 ksi	5 mm/min; ASTM D638
Flexural Modulus	10.1 GPa	1460 ksi	(102 mm Span) 3mm/min; ASTM D790
	10.8 GPa	1570 ksi	(50.8 mm Span) 1mm/min; ASTM D790
Flexural Strength	179 MPa	26000 psi	at Break, (50.8 mm Span) 1mm/min; ASTM D790
	198 MPa	28700 psi	at Break, (102 mm Span) 3mm/min; ASTM D790
Izod Impact, Unnotched	5.34 J/cm	10.0 ft-lb/in	ASTM D256
Izod Impact, Notched	0.961 J/cm	1.80 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	138 °C	280 °F	Unannealed; ASTM D648
	@Thickness 3.18 mm	@Thickness 0.125 in	
Deflection Temperature at 1.8 MPa (264 psi)	132 °C	270 °F	Unannealed; ASTM D648
	@Thickness 3.18 mm	@Thickness 0.125 in	
UL RTI, Electrical	80.0 °C	176 °F	UL 746
UL RTI, Mechanical with Impact	80.0 °C	176 °F	UL 746
UL RTI, Mechanical without Impact	80.0 °C	176 °F	UL 746
Flammability, UL94 	HB	HB	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	V-1	V-1	
	@Thickness 3.00 mm	@Thickness 0.118 in	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	293 - 316 °C	559 - 601 °F	
Middle Barrel Temperature	304 - 327 °C	579 - 621 °F	
Front Barrel Temperature	316 - 338 °C	601 - 640 °F	
Nozzle Temperature	310 - 332 °C	590 - 630 °F	
Melt Temperature	316 - 338 °C	601 - 640 °F	
Mold Temperature	82.2 - 116 °C	180 - 241 °F	
Drying Temperature	121 °C	250 °F	
Dry Time	3 - 48 hour	3 - 48 hour	
Moisture Content	0.0200 %	0.0200 %	Suggested
Back Pressure	0.345 - 0.689 MPa	50.0 - 99.9 psi	
Clamp Pressure	41.0 - 69.0 MPa	5950 - 10000 psi	
Shot Size	40.0 - 60.0 %	40.0 - 60.0 %	Suggested
Vent Depth	0.00250 - 0.00760 cm	0.000984 - 0.00299 in	
Screw Speed	40.0 - 70.0 rpm	40.0 - 70.0 rpm	