



LEXAN™ Resin ML7696
Asia Pacific: COMMERCIAL

Limited Use. LEXAN resin ML7696 is a flame retardant polycarbonate grade with 30% glass fiber reinforcement.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	960	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1500	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	67100	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	113	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
THERMAL			
Vicat Softening Temp, Rate B/50	165	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	151	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	146	°C	ASTM D 648
CTE, -40°C to 95°C, flow	2.16E-05	1/°C	ASTM E 831
Thermal Conductivity	0.22	W/m-°C	ASTM C 177
Relative Temp Index, Elec	120	°C	UL 746B
Relative Temp Index, Mech w/impact	120	°C	UL 746B
Relative Temp Index, Mech w/o impact	130	°C	UL 746B
PHYSICAL			
Specific Gravity	1.43	-	ASTM D 792
Specific Volume	0.69	cm ³ /g	ASTM D 792
Density	1.439	g/cm ³	ASTM D 792
Water Absorption, equilibrium, 23C	0.26	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm (5)	0.1 - 0.3	%	SABIC Method
Melt Flow Rate, 300°C/5.0 kgf	19	g/10 min	ASTM D 1238
ELECTRICAL			
Volume Resistivity	>1.E+17	Ohm-cm	ASTM D 257



LEXAN™ Resin ML7696
Asia Pacific: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
ELECTRICAL			
Dielectric Strength, in air, 3.2 mm	18.7	kV/mm	ASTM D 149
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	0	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	5	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1.47	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	2.99	mm	UL 94



LEXAN™ Resin ML7696
Asia Pacific: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	315 - 340	°C
Nozzle Temperature	310 - 330	°C
Front - Zone 3 Temperature	315 - 340	°C
Middle - Zone 2 Temperature	305 - 325	°C
Rear - Zone 1 Temperature	295 - 315	°C
Mold Temperature	80 - 115	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	40 - 60	%
Vent Depth	0.025 - 0.076	mm