



LEXAN™ Resin ML7664

Asia Pacific: COMMERCIAL

LEXAN ML7664 polycarbonate (PC) siloxane resin, is a product targeting (profile) extrusion applications requiring extreme low temperature ductility. LEXAN ML7664 resin is a non-FR product available in opaque colors only.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	610	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	570	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	86	%	ASTM D 638
Tensile Modulus, 5 mm/min	22400	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	980	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	23400	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	59	MPa	ISO 527
Tensile Stress, break, 50 mm/min	59	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	76	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2100	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	86	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	72	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	734	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	64	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	54	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	77	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	144	°C	ASTM D 1525



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	143	°C	ISO 306
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.6 - 1	%	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	2.7	g/10 min	ASTM D 1238
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.35	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	2	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Profile Extrusion		
Drying Temperature	120	°C
Drying Time	2 - 4	hrs
Melt Temperature	280 - 300	°C
Barrel - Zone 1 Temperature	240 - 280	°C
Barrel - Zone 2 Temperature	260 - 290	°C
Barrel - Zone 3 Temperature	260 - 290	°C
Barrel - Zone 4 Temperature	260 - 290	°C
Hopper Temperature	100 - 120	°C
Adapter Temperature	270 - 300	°C
Die Temperature	260 - 290	°C
Calibrator Temperature	80 - 100	°C