

# LEXAN<sup>TM</sup> FR RESINS ML541 1H

REGION AMERICAS

## DESCRIPTION

LEXAN ML541 1H Polycarbonate (PC) is an injection moldable grade that is 9% glass fiber filled. It has a UL94 V2@1.47mm rating.

## TYPICAL PROPERTY VALUES

Revision 20200423

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	60	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	10	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	99	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	3100	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	106	J/m	ASTM D 256
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	135	°C	ASTM D 648
Relative Temp Index, Elec	80	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.27	-	ASTM D 792
Water Absorption, 24 hours	0.15	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.2 – 0.4	%	SABIC method
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94V-2 Flame Class Rating	1.47	mm	UL 94
<b>INJECTION MOLDING</b>			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	48	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	310 – 330	°C	
Nozzle Temperature	305 – 325	°C	
Front - Zone 3 Temperature	310 – 330	°C	
Middle - Zone 2 Temperature	300 – 320	°C	
Rear - Zone 1 Temperature	290 – 310	°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	



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