

# LEXAN™ FL900S resin

Polycarbonate

SABIC Innovative Plastics Europe

## Message:

Foamable Lexan® FL900S polycarbonate resin is an ideal choice for structural components where load bearing capability at elevated temperature is a key requirement. It exhibits outstanding impact strength, high heat resistance, flexural characteristics, creep resistance and processability. In addition, it is an excellent alternative to metal for large components with broad application potential in the appliance, automotive, telecommunications, material, handling and business machine industries. The material contains 5% glass fiber and combines rigidity, impact strength and toughness with UL 94 V-0 and 5V listings.

General Information			
UL YellowCard	E45329-236674		
Filler / Reinforcement	Glass Fiber, 5.0% Filler by Weight		
Features	Good Creep Resistance		
	Good Processability		
	Good Toughness		
	High Heat Resistance		
	High Impact Resistance		
	Medium Rigidity		
Uses	Appliances		
	Automotive Applications		
	Business Equipment		
	Structural Parts		
	Telecommunications		
RoHS Compliance	RoHS Compliant		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.948	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow <sup>1</sup>	0.50 to 0.70	%	Internal Method
Water Absorption			
24 hr	0.15	%	ASTM D570
Saturation, 23°C	0.35	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2000	MPa	ISO 527-2/1
Tensile Stress (Break)	42.0	MPa	ISO 527-2/5
Tensile Strain (Break)	5.0	%	ISO 527-2/5
Flexural Modulus <sup>2</sup>	2400	MPa	ISO 178
Flexural Stress	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method

Gardner Impact	50.0	J	Internal Method
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature <sup>3</sup> (1.8 MPa, Unannealed, 64.0 mm Span)	128	°C	ISO 75-2/Af
Ball Pressure Test			IEC 60695-10-2
75°C	Pass		
125°C	Pass		
CLTE - Flow (23 to 80°C)	3.5E-5	cm/cm/°C	ISO 11359-2
Specific Heat	280	J/kg/°C	ASTM C351
Thermal Conductivity	0.15	W/m/K	ISO 8302
RTI Elec	80.0	°C	UL 746
RTI Imp	80.0	°C	UL 746
RTI Str	80.0	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength			ASTM D149
0.800 mm, in Oil	35	kV/mm	
1.60 mm, in Oil	27	kV/mm	
3.20 mm, in Oil	17	kV/mm	
Relative Permittivity			IEC 60250
100 Hz	2.41		
1 MHz	2.30		
Dissipation Factor			IEC 60250
100 Hz	2.9E-3		
1 MHz	0.010		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
3.00 mm	V-0		
5.00 mm	5VA		
Oxygen Index	35	%	ISO 4589-2
Additional Information	Nominal Value	Unit	Test Method
Filler Content	5.0	%	ASTM D229
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.020	%	
Hopper Temperature	60.0 to 80.0	°C	
Rear Temperature	265 to 295	°C	
Middle Temperature	280 to 310	°C	
Front Temperature	290 to 320	°C	
Nozzle Temperature	290 to 320	°C	
Processing (Melt) Temp	290 to 320	°C	
Mold Temperature	65.0 to 95.0	°C	

NOTE	
1.	Tensile Bar
2.	2.0 mm/min
3.	80*10*4 mm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material


## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT