

# LEXAN™ 923X resin

Polycarbonate

SABIC Innovative Plastics Asia Pacific

Message:

LEXAN923x is a UV stabilized high flow impact modified injection molding (IM) grade. This resin offers UL94 V0 @ 1.5mm flame retardancy based on non-bromine, non-chlorine FR systems, low temperature ductility characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC. LEXAN 923x resin is a product available in a wide range of opaque colors and may be an excellent candidate for a wide range of applications.

General Information			
Additive	Impact Modifier		
	UV Stabilizer		
Features	Bromine Free		
	Chlorine Free		
	Ductile		
	Fast Molding Cycle		
	Flame Retardant		
	Good Processability		
	High Flow		
	Impact Modified		
Uses	General Purpose		
Appearance	Colors Available		
	Opaque		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.19	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	16	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.40 to 0.80	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>1</sup>	2100	MPa	ASTM D638
Tensile Strength <sup>2</sup>			ASTM D638
Yield	58.0	MPa	
Break	60.0	MPa	
Tensile Elongation <sup>3</sup>			ASTM D638
Yield	6.0	%	
Break	110	%	
Flexural Modulus <sup>4</sup> (50.0 mm Span)	2400	MPa	ASTM D790
Flexural Strength <sup>5</sup> (Yield, 50.0 mm Span)	90.0	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-30°C	650	J/m	
23°C	780	J/m	
Instrumented Dart Impact (23°C, Total Energy)	65.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm)	123	°C	ASTM D648
Vicat Softening Temperature	140	°C	ASTM D1525 <sup>6</sup>
CLTE			ASTM E831
Flow : -40 to 40°C	6.1E-5	cm/cm/°C	
Transverse : -40 to 40°C	6.2E-5	cm/cm/°C	
RTI Elec	125	°C	UL 746
RTI Imp	115	°C	UL 746
RTI Str	120	°C	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.50 mm	V-0		
3.00 mm	5VA		
Glow Wire Flammability Index (1.50 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			IEC 60695-2-13
1.50 mm	825	°C	
3.00 mm	825	°C	
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	48	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 to 60	%	
Rear Temperature	270 to 295	°C	
Middle Temperature	280 to 305	°C	
Front Temperature	295 to 315	°C	
Nozzle Temperature	290 to 310	°C	
Processing (Melt) Temp	295 to 315	°C	
Mold Temperature	70.0 to 95.0	°C	
Back Pressure	0.300 to 0.700	MPa	
Screw Speed	40 to 70	rpm	
Vent Depth	0.025 to 0.076	mm	
NOTE			
1.	5.0 mm/min		
2.	Type I, 50 mm/min		
3.	Type I, 50 mm/min		

4.	1.3 mm/min
5.	1.3 mm/min
6.	Rate B (120°C/h), Loading 2 (50 N)

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

