

SABIC Innovative Plastics Lexan® EXL1192T PC Copolymer (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Lexan® EXL1192T polycarbonate (PC) siloxane copolymer resin is a transparent injection molding (IM) grade with extra release properties for food contact applications. This resin offers good low temperature (-20 C) ductility in combination with high flow characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC resins. Lexan EXL1192T resin offers enhanced release performance, is available in transparent colors and is an excellent candidate for a broad range of applications in food handling or food preparation markets. This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-EXL1192T-PC-Copolymer-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.19 g/cc	1.19 g/cc	ASTM D 792
Density	1.19 g/cc	0.0430 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.090 %	0.090 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.12 % @Temperature 23.0 °C	0.12 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0040 - 0.0080 cm/cm @Thickness 3.20 mm	0.0040 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0040 - 0.0080 cm/cm @Thickness 3.20 mm	0.0040 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	19 g/10 min @Load 1.20 kg, Temperature 300 °C	19 g/10 min @Load 2.65 lb, Temperature 572 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	20 g/10 min @Load 1.20 kg, Temperature 300 °C	20 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	89	89	ASTM D 785
Tensile Strength at Break	56.0 MPa	8120 psi	50 mm/min; ISO 527
	57.0 MPa	8270 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	57.0 MPa	8270 psi	50 mm/min; ISO 527

Mechanical Properties	Metric	English	Comments
Elongation at Break	117.9 %	117.9 %	Type I, 50 mm/min; ASTM D 638
	119.4 %	119.4 %	50 mm/min; ISO 527
Elongation at Yield	5.4 %	5.4 %	50 mm/min; ISO 527
	5.7 %	5.7 %	Type I, 50 mm/min; ASTM D 638
Tensile Modulus	2.26 GPa	328 ksi	50 mm/min; ASTM D 638
	2.34 GPa	339 ksi	1 mm/min; ISO 527
Flexural Yield Strength	89.0 MPa	12900 psi	2 mm/min; ISO 178
	94.0 MPa	13600 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.14 GPa	310 ksi	2 mm/min; ISO 178
	2.24 GPa	325 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	6.18 J/cm	11.6 ft-lb/in	ASTM D 256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	7.36 J/cm	13.8 ft-lb/in	ASTM D 256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	40.0 kJ/m ²	19.0 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	55.0 kJ/m ²	26.2 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched (ISO)	NB	NB	80*10*3; ISO 180/1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	NB	NB	80*10*3; ISO 180/1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact Unnotched	NB	NB	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	NB	NB	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	4.50 J/cm ²	21.4 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 179/1eA
Impact Test	74.0 J @Temperature 23.0 °C	54.6 ft-lb @Temperature 73.4 °F	Instrumented Impact Total Energy; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	74.8 µm/m-°C	41.6 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 95.0 °C	@Temperature -40.0 - 203 °F	
CTE, linear, Transverse to Flow	74.8 µm/m-°C	41.6 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Transverse to Flow	76.4 µm/m-°C	42.4 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 95.0 °C	@Temperature -40.0 - 203 °F	
Deflection Temperature at 1.8 MPa (264 psi)	76.4 µm/m-°C	42.4 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
Deflection Temperature at 1.8 MPa (264 psi)	116 °C	241 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	121 °C @Thickness 3.20 mm	250 °F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	138 °C	280 °F	Rate A/50; ASTM D 1525
	138 °C	280 °F	Rate B/50; ISO 306
	139 °C	282 °F	Rate B/120; ISO 306
UL RTI, Electrical	130 °C	266 °F	UL 746B
UL RTI, Mechanical without Impact	130 °C	266 °F	UL 746B
Flammability, UL94	HB	HB	UL 94
	@Thickness 1.50 mm	@Thickness 0.0591 in	
Glow Wire Test	850 °C	1560 °F	Glow Wire Ignitability Temperature; IEC 60695-2-13
	@Thickness 0.800 mm	@Thickness 0.0315 in	
Glow Wire Test	850 °C	1560 °F	Glow Wire Ignitability Temperature; IEC 60695-2-13
	@Thickness 3.00 mm	@Thickness 0.118 in	
	960 °C	1760 °F	

Thermal Properties	Metric	English	Comments
	@Thickness 3.00 mm	@Thickness 0.118 in	Glow Wire Flammability Index; IEC 60695-10-2

Optical Properties	Metric	English	Comments
Haze	3.0 % @Thickness 2.54 mm	3.0 % @Thickness 0.100 in	ASTM D 1003
Transmission, Visible	82 % @Thickness 2.54 mm	82 % @Thickness 0.100 in	ASTM D 1003

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	ASTM D 257
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ASTM D 257

Descriptive Properties	Value	Comments
Ball Pressure Test, 125°C +/- 2°C	pass	IEC 60695-10-2

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China