SABIC Innovative Plastics Lexan® EXL1464T PC Copolymer (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Lexan* EXL1464T polycarbonate (PC) siloxane copolymer resin is a transparent injection molding grade. This resin offers extreme low temperature (-40 °C) ductility in combination with medium flow characteristics, improved release and excellent processability with opportunities for shorter IM cycle times compared to standard PC. Lexan EXL1464T resin is an improved release general purpose product available in transparent and opaque colors and is an excellent candidate for a broad range of applications.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-EXL1464T-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/in³	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	9.0 g/10 min @Load 1.20 kg, Temperature 300 °C	9.0 g/10 min @Load 2.65 lb, Temperature 572 °F	[cm^3/10 min] Melt Volume Rate; ISO 1133
	10 g/10 min @Load 1.20 kg, Temperature 300 °C	10 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	87	87	ISO 2039-2
Tensile Strength at Break	55.0 MPa	7980 psi	50 mm/min; ISO 527
	59.0 MPa	8560 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	56.0 MPa	8120 psi	50 mm/min; ISO 527

Mechanical Properties	Metric	English	Comments
Elongation at Break	108.5 %	108.5 %	50 mm/min; ISO 527
	123.9 %	123.9 %	Type I, 50 mm/min; ASTM D 638
Elongation at Yield	5.4 %	5.4 %	50 mm/min; ISO 527
	5.6 %	5.6 %	Type I, 50 mm/min; ASTM D 638
Tensile Modulus	2.18 GPa	316 ksi	50 mm/min; ASTM D 638
	2.30 GPa	334 ksi	1 mm/min; ISO 527
Flexural Yield Strength	88.0 MPa	12800 psi	2 mm/min; ISO 178
	92.0 MPa	13300 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.12 GPa	307 ksi	2 mm/min; ISO 178
	2.18 GPa	316 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	7.12 J/cm @Temperature -30.0 °C	13.3 ft-lb/in @Temperature -22.0 °F	ASTM D 256
	8.24 J/cm @Temperature 23.0 °C	15.4 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Notched (ISO)	55.0 kJ/m² @Temperature -30.0 °C	26.2 ft-lb/in² @Temperature -22.0 °F	80*10*3; ISO 180/1A
	65.0 kJ/m² @Temperature 23.0 °C	30.9 ft-lb/in² @Temperature 73.4 °F	80*10*3; ISO 180/1A
Izod Impact, Unnotched (ISO)	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	80*10*3; ISO 180/1U
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	80*10*3; ISO 180/1U
Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	Edgew 80*10*3 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	6.00 J/cm² @Temperature -30.0 °C	28.6 ft-lb/in² @Temperature -22.0 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA

Mechanical Properties	Metric	English	Comments
	7.00 J/cm²	33.3 ft-lb/in²	7.7MPa; Edgew 80*10*3 sp=62mm;
	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 179/1eA
Impact Test	75.0 J @Temperature 23.0 °C	55.3 ft-lb @Temperature 73.4 °F	Instrumented Impact Total Energy; ASTM D 3763
	77.0 J @Temperature -30.0 °C	56.8 ft-lb @Temperature -22.0 °F	Instrumented Impact Total Energy; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	67.0 µm/m-°C @Temperature -40.0 - 95.0 °C	37.2 µin/in-°F @Temperature -40.0 - 203 °F	ASTM E 831
	67.0 µm/m-°C @Temperature 23.0 - 80.0 °C	37.2 µin/in-°F @Temperature 73.4 - 176 °F	ISO 11359-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C @Temperature -40.0 - 95.0 °C	44.4 µin/in-°F @Temperature -40.0 - 203 °F	ASTM E 831
	80.0 µm/m-°C @Temperature 23.0 - 80.0 °C	44.4 µin/in-°F @Temperature 73.4 - 176 °F	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	116 °C	241 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	120 °C @Thickness 3.20 mm	248 °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	V-2 @Thickness 3.00 mm	V-2 @Thickness 0.118 in	UL 94
Glow Wire Test	850 °C @Thickness 0.800 mm	1560 °F @Thickness 0.0315 in	Glow Wire Ignitability Temperature; IEC 60695-2-13
	850 °C	1560 °F	

Thermal Properties	Metric	English	Comments
	@Thickness 3.00 mm	@Thickness 0.118 in	Glow Wire Ignitability Temperature; IEC 60695-2-13
	960 °C @Thickness 3.00 mm	1760 °F @Thickness 0.118 in	Glow Wire Flammability Index; IEC 60695-2-12

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