SABIC Innovative Plastics Lexan® SLX1432D PC Copolymer (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Medium viscosity PC copolymer with enhanced UV stabilization and added release agent. Available in diffusion colors.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-SLX1432D-PC-Copolymer-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D 792
Density	1.20 g/cc	0.0434 lb/in³	ISO 1183
Moisture Absorption at Equilibrium	0.17 %	0.17 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.25 % @Temperature 23.0 °C	0.25 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0078 cm/cm @Thickness 3.20 mm	0.0050 - 0.0078 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
Tensile Strength at Break	56.0 MPa	8120 psi	50 mm/min; ISO 527
	67.0 MPa	9720 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	65.0 MPa	9430 psi	Type I, 50 mm/min; ASTM D 638
	67.0 MPa	9720 psi	50 mm/min; ISO 527
Elongation at Break	69.9 %	69.9 %	50 mm/min; ISO 527
	100 %	100 %	Type I, 50 mm/min; ASTM D 638
Elongation at Yield	5.7 %	5.7 %	50 mm/min; ISO 527
	6.0 %	6.0 %	Type I, 50 mm/min; ASTM D 638

Mechanical Properties	Metric	English	Comments
	2.75 GPa	399 ksi	50 mm/min; ASTM D 638
Flexural Yield Strength	100 MPa	14500 psi	2 mm/min; ISO 178
	109 MPa	15800 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	2.39 GPa	347 ksi	2 mm/min; ISO 178
	2.53 GPa	367 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	0.660 J/cm @Temperature -30.0 °C	1.24 ft-lb/in @Temperature -22.0 °F	ASTM D 256
	1.14 J/cm @Temperature 23.0 °C	2.14 ft-lb/in @Temperature 73.4 °F	ASTM D 256
Izod Impact, Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ASTM D 4812
Izod Impact, Notched (ISO)	10.0 kJ/m² @Temperature -30.0 °C	4.76 ft-lb/in² @Temperature -22.0 °F	80*10*3; ISO 180/1A
	25.0 kJ/m² @Temperature 23.0 °C	11.9 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
Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	Edgew 80*10*3 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	1.50 J/cm² @Temperature -30.0 °C	7.14 ft-lb/in² @Temperature -22.0 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	3.00 J/cm² @Temperature 23.0 °C	14.3 ft-lb/in² @Temperature 73.4 °F	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
Impact Test	78.0 J @Temperature 23.0 °C	57.5 ft-lb @Temperature 73.4 °F	Instrumented Impact Total Energy; ASTM D 3763
	82.0 J @Temperature -40.0 °C	60.5 ft-lb @Temperature -40.0 °F	Instrumented Impact Total Energy; ASTM D 3763

Thermal Properties	Metric	English	Comments

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	ASTM E 831
	66.6 µm/m-°C @Temperature -40.0 - 40.0 °C	37.0 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
CTE, linear, Transverse to Flow	64.8 µm/m-°C @Temperature -40.0 - 40.0 °C	36.0 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E 831
	64.8 µm/m-°C @Temperature -40.0 - 40.0 °C	36.0 µin/in-°F @Temperature -40.0 - 104 °F	ISO 11359-2
Deflection Temperature at 0.46 MPa (66 psi)	129 °C @Thickness 3.20 mm	264 °F @Thickness 0.126 in	unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	115 °C	239 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	118 °C @Thickness 3.20 mm	244 °F @Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	134 °C	273 °F	Rate B/50; ASTM D 1525
	134 °C	273 °F	Rate B/50; ISO 306
	136 °C	277 °F	Rate B/120; ISO 306
Flammability, UL94	HB @Thickness 0.750 mm	HB @Thickness 0.0295 in	UL 94

Descriptive Properties	Value	Comments
UV-light, water exposure/immersion	F1	UL 746C

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