

SABIC Innovative Plastics Lexan® ML7677A PC (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Commercial grade for Polycarbonate in only nature color. Excellent processability, super high flow, flame retardant, UL rated V-1 at 2.0mm. This data was supplied by SABIC-IP for the Asia Pacific region.

Order this product through the following link:

http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Lexan-ML7677A-PC-Asia-Pacific.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.23 g/cc	1.23 g/cc	ASTM D 792
Density	1.23 g/cc	0.0444 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.35 %	0.35 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	0.28 % @Temperature 23.0 °C	0.28 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0060 - 0.0080 cm/cm @Thickness 2.30 - 4.60 mm	0.0060 - 0.0080 in/in @Thickness 0.0906 - 0.181 in	SABIC Method
Melt Flow	23 g/10 min @Load 2.16 kg, Temperature 260 °C	23 g/10 min @Load 4.76 lb, Temperature 500 °F	ASTM D 1238
	43 g/10 min @Load 1.20 kg, Temperature 300 °C	43 g/10 min @Load 2.65 lb, Temperature 572 °F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	45 g/10 min @Load 1.20 kg, Temperature 300 °C	45 g/10 min @Load 2.65 lb, Temperature 572 °F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	52.0 MPa	7540 psi	Type I, 50 mm/min; ASTM D 638
	54.0 MPa	7830 psi	50 mm/min; ISO 527
Tensile Strength, Yield	69.0 MPa	10000 psi	Type I, 50 mm/min; ASTM D 638
	70.0 MPa	10200 psi	50 mm/min; ISO 527

Elongation at Break Mechanical Properties	50 % Metric	50 % English	Type I, 50 mm/min; ASTM D 638 Comments
	70 %	70 %	50 mm/min; ISO 527
Elongation at Yield	5.0 %	5.0 %	Type I, 50 mm/min; ASTM D 638
	5.0 %	5.0 %	50 mm/min; ISO 527
Tensile Modulus	2.65 GPa	384 ksi	1 mm/min; ISO 527
	2.67 GPa	387 ksi	50 mm/min; ASTM D 638
Flexural Yield Strength	98.0 MPa	14200 psi	1.3 mm/min, 50 mm span; ASTM D 790
	105 MPa	15200 psi	2 mm/min; ISO 178
Flexural Modulus	2.30 GPa	334 ksi	1.3 mm/min, 50 mm span; ASTM D 790
	2.60 GPa	377 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.370 J/cm	0.693 ft-lb/in	ASTM D 256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.400 J/cm	0.749 ft-lb/in	ASTM D 256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	4.00 kJ/m ²	1.90 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	4.00 kJ/m ²	1.90 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Unnotched (ISO)	181 kJ/m ²	86.1 ft-lb/in ²	80*10*3; ISO 180/1U
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	182 kJ/m ²	86.6 ft-lb/in ²	80*10*3; ISO 180/1U
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	13.0 J/cm ²	61.9 ft-lb/in ²	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	13.1 J/cm ²	62.3 ft-lb/in ²	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact, Notched	0.400 J/cm ²	1.90 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.400 J/cm ²	1.90 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm;

Mechanical Properties	@Temperature -30.0 °C Metric	@Temperature -22.0 °F English	ISO 179/1eA Comments
Impact Test	65.0 J	47.9 ft-lb	Instrumented Impact Total Energy; ASTM D 3763
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	65.0 µm/m-°C	36.1 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
	72.0 µm/m-°C	40.0 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Transverse to Flow	66.0 µm/m-°C	36.7 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 40.0 °C	@Temperature -40.0 - 104 °F	
	74.0 µm/m-°C	41.1 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)	97.0 °C	207 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	94.0 °C	201 °F	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
Vicat Softening Point	111 °C	232 °F	Rate B/50; ISO 306
	114 °C	237 °F	Rate B/120; ISO 306
	114 °C	237 °F	Rate B/50; ASTM D 1525
Flammability, UL94	V-1	V-1	UL 94 by SABIC-IP
	@Thickness 2.00 mm	@Thickness 0.0787 in	

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