

SABIC Innovative Plastics Lexan® FXD1433T PC Copolymer (Asia Pacific)

Category : Polymer , Thermoplastic , Polycarbonate (PC)

Material Notes:

Clear PC-siloxane copolymer with excellent processability in special light diffusion colors. Medium flow, UV stabilized. Improved toughness compared to standard PC in same color. Color package may affect performance. 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-FXD1433T-PC-Copolymer-Asia-Pacific.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 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	0.0040 - 0.0080 in/in	on tensile bar; SABIC Method
	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
Tensile Strength at Break	58.0 MPa	8410 psi	50 mm/min; ISO 527
	59.0 MPa	8560 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	59.0 MPa	8560 psi	50 mm/min; ISO 527
	60.0 MPa	8700 psi	Type I, 50 mm/min; ASTM D 638
Elongation at Break	99 %	99 %	Type I, 50 mm/min; ASTM D 638

Mechanical Properties	114 % Metric	114 % English	50 mm/min; ISO 527 Comments
Elongation at Yield	5.6 %	5.6 %	50 mm/min; ISO 527
	5.8 %	5.8 %	Type I, 50 mm/min; ASTM D 638
Tensile Modulus	2.32 GPa	336 ksi	50 mm/min; ASTM D 638
	2.35 GPa	341 ksi	1 mm/min; ISO 527
Flexural Yield Strength	89.0 MPa	12900 psi	1.3 mm/min, 50 mm span; ASTM D 790
	92.0 MPa	13300 psi	2 mm/min; ISO 178
Flexural Modulus	2.23 GPa	323 ksi	2 mm/min; ISO 178
	2.29 GPa	332 ksi	1.3 mm/min, 50 mm span; ASTM D 790
Izod Impact, Notched	7.95 J/cm	14.9 ft-lb/in	ASTM D 256
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Notched	8.90 J/cm	16.7 ft-lb/in	ASTM D 256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	45.0 kJ/m ²	21.4 ft-lb/in ²	80*10*3; ISO 180/1A
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Izod Impact, Notched (ISO)	65.0 kJ/m ²	30.9 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	
Izod Impact, Unnotched (ISO)	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	
Charpy Impact Unnotched	NB	NB	Edgew 80*10*3 sp=62mm; ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	5.00 J/cm ²	23.8 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	7.00 J/cm ²	33.3 ft-lb/in ²	V-notch Edgew 80*10*3 sp=62mm; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	82.0 J Metric	60.5 ft-lb English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	Charpy Impact Total Energy; ASTM D 3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	71.5 µm/m-°C	39.7 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 95.0 °C	@Temperature -40.0 - 203 °F	
	71.5 µm/m-°C	39.7 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Transverse to Flow	79.3 µm/m-°C	44.1 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 95.0 °C	@Temperature -40.0 - 203 °F	
	79.3 µm/m-°C	44.1 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)	119 °C	246 °F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	124 °C	255 °F	
	@Thickness 3.20 mm	@Thickness 0.126 in	unannealed; ASTM D 648
Vicat Softening Point	141 °C	286 °F	Rate A/50; ASTM D 1525
	141 °C	286 °F	Rate B/50; ISO 306
	143 °C	289 °F	Rate B/120; ISO 306

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