

SABIC Innovative Plastics Xenoy® X3515 PC+POLYESTER (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polyester, TP

Material Notes:

Flame Retardant, Impact Modified, Opaque, Designed for outdoor telecommunication enclosure 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-Xenoy-X3515-PCPOLYESTER-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 g/cc	1.30 g/cc	ASTM D 792
Density	1.30 g/cc	0.0470 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.15 %	0.15 %	23Â°C / 50% RH; ISO 62
Water Absorption at Saturation	0.50 % @Temperature 23.0 Â°C	0.50 % @Temperature 73.4 Â°F	ISO 62
Linear Mold Shrinkage, Flow	0.0080 - 0.010 cm/cm @Thickness 3.20 mm	0.0080 - 0.010 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0080 - 0.010 cm/cm @Thickness 3.20 mm	0.0080 - 0.010 in/in @Thickness 0.126 in	SABIC Method
Melt Flow	4.0 g/10 min @Load 2.16 kg, Temperature 250 Â°C	4.0 g/10 min @Load 4.76 lb, Temperature 482 Â°F	ISO 1133
	4.0 g/10 min @Load 2.16 kg, Temperature 250 Â°C	4.0 g/10 min @Load 4.76 lb, Temperature 482 Â°F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	4.8 g/10 min @Load 2.16 kg, Temperature 250 Â°C	4.8 g/10 min @Load 4.76 lb, Temperature 482 Â°F	ASTM D 1238
	7.0 g/10 min @Load 2.16 kg, Temperature 265 Â°C	7.0 g/10 min @Load 4.76 lb, Temperature 509 Â°F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	8.0 g/10 min @Load 2.16 kg, Temperature 265 Â°C	8.0 g/10 min @Load 4.76 lb, Temperature 509 Â°F	ASTM D 1238

Physical Properties	Metric	English	Comments
	13 g/10 min @Load 5.00 kg, Temperature 250 Â°C	13 g/10 min @Load 11.0 lb, Temperature 482 Â°F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	15 g/10 min @Load 5.00 kg, Temperature 250 Â°C	15 g/10 min @Load 11.0 lb, Temperature 482 Â°F	ISO 1133
	15.1 g/10 min @Load 5.00 kg, Temperature 250 Â°C	15.1 g/10 min @Load 11.0 lb, Temperature 482 Â°F	ASTM D 1238
	23 g/10 min @Load 5.00 kg, Temperature 265 Â°C	23 g/10 min @Load 11.0 lb, Temperature 509 Â°F	[cm ³ /10 min] Melt Volume Rate; ISO 1133
	26.7 g/10 min @Load 5.00 kg, Temperature 266 Â°C	26.7 g/10 min @Load 11.0 lb, Temperature 511 Â°F	ASTM D 1238

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	40.0 MPa	5800 psi	50 mm/min; ISO 527
	42.0 MPa	6090 psi	Type I, 50 mm/min; ASTM D 638
Tensile Strength, Yield	47.0 MPa	6820 psi	50 mm/min; ISO 527
	52.0 MPa	7540 psi	Type I, 50 mm/min; ASTM D 638
Elongation at Break	44 %	44 %	Type I, 50 mm/min; ASTM D 638
	58 %	58 %	50 mm/min; ISO 527
Elongation at Yield	4.1 %	4.1 %	50 mm/min; ISO 527
	4.3 %	4.3 %	Type I, 50 mm/min; ASTM D 638
Tensile Modulus	1.96 GPa	284 ksi	1 mm/min; ISO 527
	2.15 GPa	312 ksi	5 mm/min; ASTM D 638
Flexural Yield Strength	71.0 MPa	10300 psi	2 mm/min; ISO 178
	72.0 MPa	10400 psi	1.3 mm/min, 50 mm span; ASTM D 790
Flexural Modulus	1.86 GPa	270 ksi	1.3 mm/min, 50 mm span; ASTM D 790
	1.89 GPa	274 ksi	2 mm/min; ISO 178
	4.27 J/cm	8.00 ft-lb/in	

Izod Impact, Notched Mechanical Properties	Metric @ Temperature -40.0 Â°C	English @ Temperature -40.0 Â°F	ASTM D 256 Comments
	4.50 J/cm	8.43 ft-lb/in	ASTM D 256
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	6.94 J/cm	13.0 ft-lb/in	ASTM D 256
	@Temperature -20.0 Â°C	@Temperature -4.00 Â°F	
	7.47 J/cm	14.0 ft-lb/in	ASTM D 256
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Izod Impact, Notched (ISO)	40.0 kJ/mÂ²	19.0 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	43.0 kJ/mÂ²	20.5 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature -10.0 Â°C	@Temperature 14.0 Â°F	
	47.0 kJ/mÂ²	22.4 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature 0.000 Â°C	@Temperature 32.0 Â°F	
	53.0 kJ/mÂ²	25.2 ft-lb/inÂ²	80*10*4; ISO 180/1A
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Charpy Impact, Notched	5.30 J/cmÂ²	25.2 ft-lb/inÂ²	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Impact Test	56.0 J	41.3 ft-lb	Instrumented Impact, Energy @ peak; ASTM D 3763
	@Temperature -20.0 Â°C	@Temperature -4.00 Â°F	
	62.0 J	45.7 ft-lb	Instrumented Impact Total Energy; ASTM D 3763
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
	70.0 J	51.6 ft-lb	Instrumented Impact Energy @ peak; ASTM D 3763
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	74.0 J	54.6 ft-lb	Instrumented Impact Energy @ peak; ASTM D 3763
	@Temperature -40.0 Â°C	@Temperature -40.0 Â°F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	98.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	54.4 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	98.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	54.4 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
CTE, linear, Transverse to Flow	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM E 831
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ISO 11359-2
	@Temperature -40.0 - 40.0 $\text{Å}^\circ\text{C}$	@Temperature -40.0 - 104 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	114 $\text{Å}^\circ\text{C}$	237 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	110 $\text{Å}^\circ\text{C}$	230 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
	123 $\text{Å}^\circ\text{C}$	253 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Deflection Temperature at 1.8 MPa (264 psi)	88.0 $\text{Å}^\circ\text{C}$	190 $\text{Å}^\circ\text{F}$	Flatw 80*10*4 sp=64mm; ISO 75/Af
	74.0 $\text{Å}^\circ\text{C}$	165 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 3.20 mm	@Thickness 0.126 in	
	95.0 $\text{Å}^\circ\text{C}$	203 $\text{Å}^\circ\text{F}$	unannealed; ASTM D 648
	@Thickness 6.40 mm	@Thickness 0.252 in	
Vicat Softening Point	120 $\text{Å}^\circ\text{C}$	248 $\text{Å}^\circ\text{F}$	Rate B/50; ASTM D 1525
	120 $\text{Å}^\circ\text{C}$	248 $\text{Å}^\circ\text{F}$	Rate B/50; ISO 306
	122 $\text{Å}^\circ\text{C}$	252 $\text{Å}^\circ\text{F}$	Rate B/120; ISO 306
UL RTI, Electrical	75.0 $\text{Å}^\circ\text{C}$	167 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical with Impact	75.0 $\text{Å}^\circ\text{C}$	167 $\text{Å}^\circ\text{F}$	UL 746B
UL RTI, Mechanical without Impact	75.0 $\text{Å}^\circ\text{C}$	167 $\text{Å}^\circ\text{F}$	UL 746B
Flammability, UL94	V-0	V-0	UL 94 by SABIC-IP
	@Thickness 1.47 mm	@Thickness 0.0579 in	

Electrical Properties	Metric	English	Comments
Arc Resistance	120 - 180 sec	120 - 180 sec	Tungsten, PLC code 5; ASTM D 495
Comparative Tracking Index	>= 600 V	>= 600 V	PLC code 0; UL 746A
Hot Wire Ignition, HWI	30 - 60 sec	30 - 60 sec	PLC code 2; UL 746A
High Amp Arc Ignition, HAI	>= 120 arcs	>= 120 arcs	surface, PLC code 0; UL 746A
High Voltage Arc-Tracking Rate, HVTR	25.4 - 80.0 mm/min	1.00 - 3.15 in/min	PLC code 2; UL 746A

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