SABIC Innovative Plastics ValoxÂ® IQ357U PBT+PC (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate/Polybutylene Terephthalate (PBT) Blend, Unreinforced , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

Valox* Resin IQ357U: Environmentally responsible, low carbon footprint iQ* PBT + PC alloy. UL94 V-0 @0.63 mm. Impact modified and UV stabilized resin.

Order this product through the following link:
http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Valox-IQ357U-PBTPC-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.35 g/cc	1.35 g/cc	ASTM D792
Density	1.34 g/cc	0.0484 lb/inÂ³	ISO 1183
Moisture Absorption	0.0800 %	0.0800 %	23Â°C / 50% RH; ISO 62
Water Absorption at Saturation	0.080 %	0.080 %	ISO 62
Viscosity	260000 cP	260000 cP	Melt Viscosity, 260Â°C, 1500 sec-1; ISO 11443
Linear Mold Shrinkage, Flow	0.011 - 0.018 cm/cm	0.011 - 0.018 in/in	on Tensile Bar; SABIC Method
	0.011 - 0.014 cm/cm @Thickness 3.20 mm	0.011 - 0.014 in/in @Thickness 0.126 in	SABIC Method
Linear Mold Shrinkage, Transverse	0.0090 - 0.018 cm/cm	0.0090 - 0.018 in/in	on Tensile Bar; SABIC Method
Melt Flow	9.0 g/10 min @Load 5.00 kg, Temperature 250 Â°C	9.0 g/10 min @Load 11.0 lb, Temperature 482 Â°F	ASTM D1238
	22 g/10 min @Load 5.00 kg, Temperature 265 Â°C	22 g/10 min @Load 11.0 lb, Temperature 509 Â°F	ASTM D1238
	22 g/10 min @Load 5.00 kg, Temperature 266 Â°C	22 g/10 min @Load 11.0 lb, Temperature 511 Â°F	ASTM D1238
Melt Index of Compound	9.0 g/10 min @Load 5.00 kg, Temperature 250 Â°C	9.0 g/10 min @Load 11.0 lb, Temperature 482 Â°F	MVR [cm^3/10 min]; ISO 1133
	19 g/10 min @Load 5.00 kg, Temperature 265 Â°C	19 g/10 min @Load 11.0 lb, Temperature 509 Â°F	MVR [cm^3/10 min]; ISO 1133

Physical Properties	Metric	English	Comments
Mechanical Properties	**Metric**	**English**	**Comments**
Hardness, Rockwell R	113	113	ISO 2039-2
Hardness, H358/30	108 MPa	15700 psi	ISO 2039-1
Tensile Strength at Break	41.0 MPa	5950 psi	Type I, 50 mm/min; ASTM D638
	41.0 MPa	5950 psi	50 mm/min; ISO 527
Tensile Strength, Yield	50.0 MPa	7250 psi	Type I, 50 mm/min; ASTM D638
	50.0 MPa	7250 psi	50 mm/min; ISO 527
Elongation at Break	25 %	25 %	Type I, 50 mm/min; ASTM D638
	32 %	32 %	50 mm/min; ISO 527
Elongation at Yield	4.0 %	4.0 %	Type I, 50 mm/min; ASTM D638
	5.0 %	5.0 %	50 mm/min; ISO 527
Tensile Modulus	1.96 GPa	284 ksi	1 mm/min; ISO 527
	2.00 GPa	290 ksi	50 mm/min; ASTM D638
Flexural Yield Strength	72.0 MPa	10400 psi	2 mm/min; ISO 178
	75.0 MPa	10900 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	1.96 GPa	284 ksi	2 mm/min; ISO 178
	2.10 GPa	305 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	4.40 J/cm	8.24 ft-lb/in	ASTM D256
	1.20 J/cm @Temperature -30.0 Â°C	2.25 ft-lb/in @Temperature -22.0 Â°F	ASTM D256
	1.80 J/cm @Temperature 0.000 Â°C	3.37 ft-lb/in @Temperature 32.0 Â°F	ASTM D256
Izod Impact, Unnotched	NB	NB	ASTM D4812
	NB @Temperature -30.0 Â°C	NB @Temperature -22.0 Â°F	ASTM D4812
Izod Impact, Notched (ISO)	21.0 kJ/mÂ²	9.99 ft-lb/inÂ²	80*10*4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
	8.00 kJ/mÂ² @Temperature -30.0 Â°C	3.81 ft-lb/inÂ² @Temperature -22.0 Â°F	80*10*4; ISO 180/1A
	15.0 kJ/mÂ² @Temperature 0.000 Â°C	7.14 ft-lb/inÂ² @Temperature 32.0 Â°F	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	NB	NB	80*10*4; ISO 180/1U
	NB @Temperature -30.0 Â°C	NB @Temperature -22.0 Â°F	80*10*4; ISO 180/1U
Charpy Impact Unnotched	NB	NB	ISO 179/2C
	NB @Temperature -30.0 Â°C	NB @Temperature -22.0 Â°F	ISO 179/2C
Charpy Impact, Notched	2.30 J/cmÂ²	10.9 ft-lb/inÂ²	ISO 179/2C
	3.40 J/cmÂ²	16.2 ft-lb/inÂ²	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.00 J/cmÂ² @Temperature -30.0 Â°C	4.76 ft-lb/inÂ² @Temperature -22.0 Â°F	ISO 179/2C
Dart Drop, Total Energy	50.0 J @Temperature 23.0 Â°C	36.9 ft-lb @Temperature 73.4 Â°F	ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	81.6 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	45.3 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	81.6 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	45.3 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	97.4 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	54.1 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ASTM E 831
	97.4 Âµm/m-Â°C @Temperature -40.0 - 40.0 Â°C	54.1 Âµin/in-Â°F @Temperature -40.0 - 104 Â°F	ISO 11359-2

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (67 psi)	125 Â°C	257 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	125 Â°C @Thickness 3.20 mm	257 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	90.0 Â°C	194 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Af
	90.0 Â°C @Thickness 3.20 mm	194 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	133 Â°C	271 Â°F	Rate B/50; ASTM D1525
	133 Â°C	271 Â°F	Rate B/50; ISO 306
	135 Â°C	275 Â°F	Rate B/120; ISO 306
	165 Â°C	329 Â°F	Rate A/50; ISO 306
	165 Â°C	329 Â°F	Rate A/50; ASTM D1525
UL RTI, Electrical	120 Â°C	248 Â°F	UL 746B
UL RTI, Mechanical with Impact	120 Â°C	248 Â°F	UL 746B
UL RTI, Mechanical without Impact	140 Â°C	284 Â°F	UL 746B
Flammability, UL94	V-0 @Thickness 0.630 mm	V-0 @Thickness 0.0248 in	UL 94 by SABIC-IP

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	ASTM D257
Arc Resistance	60 - 120 sec	60 - 120 sec	Tungsten; ASTM D495
Comparative Tracking Index	250 - 400 V	250 - 400 V	UL 746A
Hot Wire Ignition, HWI	30 - 60 sec	30 - 60 sec	UL 746A
High Amp Arc Ignition, HAI	15 - 30 arcs	15 - 30 arcs	UL 746A
High Voltage Arc-Tracking Rate, HVTR	>= 150 mm/min	>= 5.91 in/min	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