SABIC Innovative Plastics XENOY XL1562 Polyes[illegible] / Polycarbonate (Europe)

Categories: Polymer; Thermoplastic; Polycarbonate; Polyester, TP

Material Notes: Information provided by GE Plastics for their European product line.

Saudi Basic Industries Corporation (SABIC) announced on August 31st, 2007, the completion of its purchase of GE Plastics.

Vendors: No vendors are listed for this material. Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.23 g/cc	0.0444 lb/in³	ASTM D 792
	1.23 g/cc	0.0444 lb/in³	ISO 1183
Moisture Absorption at Equilibrium	0.150 %	0.150 %	(23 C / 50% RH) 1L; ISO 15512
Water Absorption at Saturation	0.500 %	0.500 %	23C; ISO 62
Viscosity	250000 cP	250000 cP	Melt Viscosity (MV), 260 C, 1500 1/sec; DIN 54811
Linear Mold Shrinkage	0.00800 - 0.0110 cm/cm	0.00800 - 0.0110 in/in	Flow; ASTM D 955
Linear Mold Shrinkage, Transverse	0.00800 - 0.0110 cm/cm	0.00800 - 0.0110 in/in	ASTM D 955
Melt Flow	9.00 g/10 min	9.00 g/10 min	cm3/10min; Melt Volume Rate, MVR at 250C/2.16 kg; ISO 1133
	27.0 g/10 min	27.0 g/10 min	cm3/10min; Melt Volume Rate, MVR at 250C/5.0 kg; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, H358/30	100 MPa	14500 psi	ISO 2039/1
Tensile Strength, Ultimate	42.0 MPa	6090 psi	50 mm/min; ISO 527
Tensile Strength, Yield	54.0 MPa	7830 psi	50 mm/min; ISO 527
Elongation at Break	100 %	100 %	50 mm/min; ISO 527
Elongation at Yield	5.00 %	5.00 %	50 mm/min; ISO 527
Tensile Modulus	2.10 GPa	305 ksi	1 mm/min; ISO 527
Flexural Modulus	2.00 GPa	290 ksi	2 mm/min; ISO 178
Flexural Yield Strength	74.0 MPa	10700 psi	2 mm/min; ISO 178
Izod Impact, Unnotched (ISO)	NB	NB	80*10*4 +23 C; ISO 180/ 1U
Izod Impact, Unnotched Low Temp (ISO)	NB	NB	80*10*4 -30 C; ISO 180/ 1U
Izod Impact, Notched, Low Temp (ISO)	18.0 kJ/m²	8.57 ft-lb/in²	80*10*4 -30 C; ISO 180/ 1A
Charpy Impact Unnotched	NB	NB	23C, Unnotch Edgew 80*10*4 sp=62; ISO 179/1eU
Charpy Impact, Notched, Low Temp	2.00 J/cm²	9.52 ft-lb/in²	at -30C, V-notch Edgew 80*10*4 sp=62; ISO 179/1eA
Charpy Impact, Unnotched Low Temp	NB	NB	at -30C, Unnotch Edgew 80*10*4 sp=62; ISO 179/1eU
Charpy Impact, Notched	5.00 J/cm²	23.8 ft-lb/in²	23C, V-notch Edgew 80*10*4 sp=62; ISO 179/1eA
Taber Abrasion, mg/1000 Cycles	30.0	30.0	CS-17, 1 kg; GE Test
Izod Impact, Notched (ISO)	45.0 kJ/m²	21.4 ft-lb/in²	80*10*4 +23 C; ISO 180/ 1A

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	IEC 60093
Surface Resistivity per Square	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	2.80	2.80	50 Hz; IEC 60250
	2.90	2.90	1 MHz; IEC 60250
Dielectric Strength	17.0 kV/mm	432 kV/in	in oil, 3.2 mm; IEC 60243-1
	25.0 kV/mm	635 kV/in	in oil, 1.6 mm; IEC 60243-1
	32.0 kV/mm	813 kV/in	in oil, 0.8 mm; IEC 60243-1
Dissipation Factor	0.00200	0.00200	50 Hz; IEC 60250
	0.0200	0.0200	1 MHz; IEC 60250
Comparative Tracking Index	600 V	600 V	Electr Grey; IEC 60112/3rd

Thermal Properties	Metric	English	Comments
CTE, linear	110 µm/m-°C @Temperature 23.0 - 80.0 °C	61.1 µin/in-°F @Temperature 73.4 - 176 °F	Flow; ISO 11359-2
CTE, linear, Transverse to Flow	110 µm/m-°C @Temperature 23.0 - 80.0 °C	61.1 µin/in-°F @Temperature 73.4 - 176 °F	ISO 11359-2
Thermal Conductivity	0.180 W/m-K	1.25 BTU-in/hr-ft²-°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	110 °C	230 °F	HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	80.0 °C	176 °F	HDT/Ae, 1.82 MPa Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	125 °C	257 °F	B/50; ISO 306
	128 °C	262 °F	B/120; ISO 306
	190 °C	374 °F	A/50; ISO 306
Flammability, UL94	HB	HB	1.5 mm
Glow Wire Test	750 °C	1380 °F	Passes at 3.2 mm; EDF HN60S02
	750 °C	1380 °F	Passes at 3.2 mm; IEC 60695-2-1

Descriptive Properties			
Ball Pressure Test, 125 C +/- 2 C	PASSES		IEC 60035-1

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistant format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your