

XENOY™ RESIN 6620

REGION AMERICAS

DESCRIPTION

PBT+PC, Unreinforced, impact modified thermoplastic alloy. Outstanding impact at low temperature

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	43	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	175	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	64	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1720	MPa	ASTM D790
Hardness, Rockwell R	108	-	ASTM D785
IMPACT			
Izod Impact, unnotched, 23°C	1602	J/m	ASTM D4812
Izod Impact, notched, 23°C	850	J/m	ASTM D256
Izod Impact, notched, -30°C	667	J/m	ASTM D256
Gardner, 23°C	54	J	ASTM D3029
Modified Gardner, 23°C	54	J	ASTM D3029
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	93	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	53	°C	ASTM D648
HDT, 0.45 MPa, 6.4 mm, unannealed	98	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	60	°C	ASTM D648
CTE, -40°C to 40°C, flow	9.4E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	9.8E-05	1/°C	ASTM E831
CTE, 60°C to 138°C, flow	1.03E-04	1/°C	ASTM E831
Relative Temp Index, Elec	75	°C	UL 746B
Relative Temp Index, Mech w/impact	75	°C	UL 746B
Relative Temp Index, Mech w/o impact	75	°C	UL 746B
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Specific Volume	0.83	cm ³ /g	ASTM D792
Water Absorption, (23°C/24hrs)	0.08	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	1.5 – 2.0	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	1.6 – 1.8	%	SABIC method
ELECTRICAL			
Volume Resistivity	5.5E+16	Ω.cm	ASTM D257
Dielectric Strength, in air, 3.2 mm	19	kV/mm	ASTM D149
Dielectric Strength, in oil, 1.6 mm	27.9	kV/mm	ASTM D149
Dielectric Strength, in oil, 3.2 mm	19	kV/mm	ASTM D149
Relative Permittivity, 100 Hz	3.1	-	ASTM D150
Relative Permittivity, 100 kHz	3	-	ASTM D150

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Permittivity, 1 MHz	3	-	ASTM D150
Dissipation Factor, 100 Hz	0.002	-	ASTM D150
Dissipation Factor, 100 kHz	0.02	-	ASTM D150
Dissipation Factor, 1 MHz	0.02	-	ASTM D150
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D495
Hot Wire Ignition {PLC}	3	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-221088	-	-
UL Recognized, 94HB Flame Class Rating	1.47	mm	UL 94
INJECTION MOLDING			
Drying Temperature	105 – 115	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	240 – 260	°C	
Nozzle Temperature	240 – 260	°C	
Front - Zone 3 Temperature	240 – 260	°C	
Middle - Zone 2 Temperature	230 – 250	°C	
Rear - Zone 1 Temperature	225 – 245	°C	
Mold Temperature	50 – 80	°C	
Back Pressure	0.2 – 0.3	MPa	
Shot to Cylinder Size	50 – 80	%	
Vent Depth	0.013 – 0.02	mm	