

XENOVY™ RESIN 6620U

REGION AMERICAS

DESCRIPTION

PBT+PC, Unfilled, Impact Modified, UV stabilized. Outstanding low temperature impact performance and chemical resistance.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	43	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	32	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.2	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	145	%	ASTM D 638
Tensile Modulus, 50 mm/min	1780	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	63	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1780	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	41	MPa	ISO 527
Tensile Stress, break, 50 mm/min	31	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.9	%	ISO 527
Tensile Strain, break, 50 mm/min	19.4	%	ISO 527
Tensile Modulus, 1 mm/min	1830	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	60	MPa	ISO 178
Flexural Modulus, 2 mm/min	1690	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1602	J/m	ASTM D 4812
Izod Impact, notched, 23°C	897	J/m	ASTM D 256
Izod Impact, notched, -30°C	667	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	56	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	54	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	51	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	72	kJ/m²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	123	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	98	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	60	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.89E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.05E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.89E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.05E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	118	°C	ISO 306
Vicat Softening Temp, Rate B/120	121	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	50	°C	ISO 75/Af
Relative Temp Index, Elec	75	°C	UL 746B
Relative Temp Index, Mech w/impact	75	°C	UL 746B



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Temp Index, Mech w/o impact	75	°C	UL 746B
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Specific Volume	0.83	cm ³ /g	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	1.6 – 1.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	1.6 – 1.8	%	SABIC method
Melt Flow Rate, 266°C/5.0 kgf	21.9	g/10 min	ASTM D 1238
Density	1.21	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.14	%	ISO 62
Melt Volume Rate, MVR at 265°C/5.0 kg	17	cm ³ /10 min	ISO 1133
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
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	250 – 270	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	250 – 265	°C	
Middle - Zone 2 Temperature	240 – 255	°C	
Rear - Zone 1 Temperature	230 – 245	°C	
Mold Temperature	40 – 80	°C	
Back Pressure	0.2 – 0.3	MPa	
Shot to Cylinder Size	50 – 80	%	
Vent Depth	0.013 – 0.02	mm	

