

XENOY™ RESIN 6620U

REGION ASIA

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20180905

| 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/m ² | ISO 180/1A |
| Izod Impact, notched 80°10*4 -30°C | 51 | kJ/m ² | ISO 180/1A |
| Charpy 23°C, V-notch Edgew 80°10*4 sp=62mm | 72 | kJ/m ² | 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 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 | |

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