

Xenoy* Resin 5220

Americas: COMMERCIAL

Unreinforced, polycarbonate-based polymer blend, excellent chemical resistance and impact.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	53	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	58	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	84	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2040	MPa	ASTM D 790
Hardness, Rockwell R	112	-	ASTM D 785
IMPACT			
Izod Impact, unnotched, 23°C	3204	J/m	ASTM D 4812
Izod Impact, notched, 23°C	710	J/m	ASTM D 256
Izod Impact, notched, -40°C	299	J/m	ASTM D 256
Gardner, 23°C	54	J	ASTM D 3029
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	106	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	98	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.74E-05	1/°C	ASTM E 831
CTE, -40°C to 95°C, flow	9.E-05	1/°C	ASTM E 831
CTE, 60°C to 138°C, flow	1.1E-04	1/°C	ASTM E 831
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	1.21	-	ASTM D 792
Specific Volume	0.82	cm³/g	ASTM D 792
Water Absorption, 24 hours	0.12	%	ASTM D 570



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PHYSICAL			
Mold Shrinkage, flow, 3.2 mm	0.8 - 1	%	SABIC Method
Mold Shrinkage on Tensile Bar, xflow (2)	0.8 - 1	%	SABIC Method
ELECTRICAL			
Volume Resistivity	2.4E+16	Ohm-cm	ASTM D 257
Dielectric Strength, in air, 3.2 mm	20.7	kV/mm	ASTM D 149
Relative Permittivity, 100 Hz	2.99	-	ASTM D 150
Relative Permittivity, 1 MHz	3.04	-	ASTM D 150
Dissipation Factor, 100 Hz	0.002	-	ASTM D 150
Dissipation Factor, 1 MHz	0.019	-	ASTM D 150
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}	0	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	110	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 275	°C
Nozzle Temperature	255 - 270	°C
Front - Zone 3 Temperature	255 - 275	°C
Middle - Zone 2 Temperature	250 - 270	°C
Rear - Zone 1 Temperature	245 - 265	°C
Mold Temperature	65 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 80	rpm
Shot to Cylinder Size	50 - 80	%
Vent Depth	0.013 - 0.02	mm

