

Xenoy* Resin 6123

Americas: COMMERCIAL

Unreinforced, impact modified, thermoplastic alloy. High impact strength while retaining mechanical and thermal properties.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	130	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	75	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1990	MPa	ASTM D 790
Hardness, Rockwell R	116	-	ASTM D 785
IMPACT			
Izod Impact, unnotched, 23°C	1602	J/m	ASTM D 4812
Izod Impact, notched, 23°C	801	J/m	ASTM D 256
Modified Gardner, 23°C	54	J	ASTM D 3029
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	115	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	86	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.E-05	1/°C	ASTM E 831
CTE, 60°C to 138°C, flow	1.44E-04	1/°C	ASTM E 831
Relative Temp Index, Elec	120	°C	UL 746B
Relative Temp Index, Mech w/impact	115	°C	UL 746B
Relative Temp Index, Mech w/o impact	125	°C	UL 746B
PHYSICAL			
Specific Gravity	1.24	-	ASTM D 792
Specific Volume	0.8	cm³/g	ASTM D 792
Water Absorption, 24 hours	0.11	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	1.2 - 1.5	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	1.2 - 1.5	%	SABIC Method
ELECTRICAL			
Volume Resistivity	1.E+16	Ohm-cm	ASTM D 257



Xenoy* Resin 6123

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
ELECTRICAL			
Dielectric Strength, in air, 3.2 mm	17.5	kV/mm	ASTM D 149
Dielectric Strength, in oil, 1.6 mm	22.6	kV/mm	ASTM D 149
Relative Permittivity, 100 Hz	3.1	-	ASTM D 150
Relative Permittivity, 1 MHz	3.1	-	ASTM D 150
Dissipation Factor, 100 Hz	0.002	-	ASTM D 150
Dissipation Factor, 1 MHz	0.02	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94



Xenoy* Resin 6123

Americas: COMMERCIAL

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

