

Xenoy* Resin 5220U

Americas: COMMERCIAL

Unreinforced PBT+PC alloy. Improved retention of mechanical properties under UV. Excellent low temperature/chemical resistance.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	53	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	2030	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	710	J/m	ASTM D 256
Izod Impact, notched, -40°C	299	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	107	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	98	°C	ASTM D 648
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	Value	Unit	Standard
Specific Gravity	1.21	-	ASTM D 792
Specific Volume	0.82	cm ³ /g	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.8 - 1	%	SABIC Method
Mold Shrinkage on Tensile Bar, xflow (2)	0.8 - 1	%	SABIC Method
ELECTRICAL	Value	Unit	Standard
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	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.49	mm	UL 94
UV-light, water exposure/immersion	F2	-	UL 746C

Source GMD, last updated:01/05/2000

Processing

- Dry for recommended time and temperature as overdrying can cause loss of physical properties and/or create appearance defects.

Parameter	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
Parameter		
Sheet Extrusion	Value	Unit
Drying Temperature	110 - 115	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0 - 0.02	%
Melt Temperature	245 - 275	°C
Barrel - Zone 1 Temperature	170 - 205	°C
Barrel - Zone 2 Temperature	195 - 255	°C
Barrel - Zone 3 Temperature	205 - 280	°C
Barrel - Zone 4 Temperature	205 - 280	°C
Adapter Temperature	225 - 280	°C
Die Temperature	230 - 280	°C
Roll Stack Temp - Top	70 - 80	°C
Roll Stack Temp - Middle	75 - 80	°C
Roll Stack Temp - Bottom	80 - 95	°C

Source GMD, last updated:01/05/2000

- Purge material from extruder prior to shutdown.

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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