



XENOY™ Resin 1102

Europe-Africa-Middle East: COMMERCIAL

Unreinforced PC/polyester alloy. Excellent low temperature impact/chemical resistance to automotive fluids.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	550	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	830	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	20000	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	115	%	ISO 527
Flexural Stress, yield, 2 mm/min	72	MPa	ISO 178
Flexural Modulus, 2 mm/min	1870	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	81	cm-kgf/cm	ASTM D 256
Izod Impact, notched, 0°C	70	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	65	cm-kgf/cm	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	54	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	52	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	44	kJ/m ²	ISO 180/1A
Charpy 0°C, V-notch Edgew 80*10*3 sp=62mm	50	kJ/m ²	ISO 179/1eA
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	55	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	40	kJ/m ²	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	110	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	90	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.1E-04	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	155	°C	ISO 306
Vicat Softening Temp, Rate B/120	120	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	79	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Specific Volume	0.83	cm ³ /g	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.8 - 1	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.8 - 1	%	SABIC Method
Density	1.19	g/cm ³	ISO 1183
Melt Flow Rate, 250°C/5.0 kg	13	g/10 min	ISO 1133
Melt Volume Rate, MVR at 250°C/2.16 kg	6	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 250°C/5.0 kg	12	cm ³ /10 min	ISO 1133



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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