XENOY™ RESIN 1102

REGION EUROPE

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20190815

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	54	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	82	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1960	MPa	ASTM D790
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	800	J/m	ASTM D256
Izod Impact, notched, 0°C	690	J/m	ASTM D256
Izod Impact, notched, -30°C	640	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	54	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	52	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	44	kJ/m²	ISO 180/1A
Charpy 0°C, V-notch Edgew 80*10*3 sp=62mm	50	kJ/m²	ISO 179/1eA
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	55	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	40	kJ/m²	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m²	ISO 179/1eU
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	110	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	90	°C	ASTM D648
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 D792
Specific Volume	0.83	cm³/g	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.8 – 1	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.8 – 1	%	SABIC method
Density	1.19	g/cm³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 250°C/5.0 kg	12	cm³/10 min	ISO 1133
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	

DISCLAIMER