

XENOVY™ RESIN 1105

REGION ASIA

DESCRIPTION

PBT/PC blend, injection molding grade, non-reinforced, impact modified, excellent toughness at low temperatures, very good paintability

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	48	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	45	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.2	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	110	%	ASTM D 638
Tensile Modulus, 50 mm/min	2010	MPa	ASTM D 638
Tensile Modulus, 5 mm/min	1980	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	76	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	74	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1900	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	52	MPa	ISO 527
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.5	%	ISO 527
Tensile Strain, break, 50 mm/min	116	%	ISO 527
Tensile Modulus, 1 mm/min	2070	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	78	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7.3	%	ISO 178
Flexural Modulus, 2 mm/min	2010	MPa	ISO 178
Hardness, Shore D	79	-	ISO 868
IMPACT			
Izod Impact, notched, 23°C	755	J/m	ASTM D 256
Izod Impact, notched, 0°C	715	J/m	ASTM D 256
Izod Impact, notched, -10°C	695	J/m	ASTM D 256
Izod Impact, notched, -20°C	687	J/m	ASTM D 256



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched, -30°C	489	J/m	ASTM D 256
Izod Impact, notched, -40°C	372	J/m	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	63	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	51	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	34	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	62	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	47	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	122	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	115	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	97	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	122	°C	ISO 306
Vicat Softening Temp, Rate B/120	123	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	109	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Specific Volume	1.2	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
Melt Flow Rate, 250°C/5.0 kgf	16	g/10 min	ASTM D 1238
Density	1.2	g/cm ³	ISO 1183
Melt Flow Rate, 250°C/5.0 kg	16	g/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

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

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Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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