GELOY™ RESIN XP4045LG

REGION AMERICAS

DESCRIPTION

PC/ASA. Excellent weatherability, low gloss.

TYPICAL PROPERTY VALUES

Revision 20190925

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	60	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5.2	%	ISO 527
Tensile Strain, break, 50 mm/min	46.7	%	ISO 527
Tensile Modulus, 1 mm/min	2320	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	93	MPa	ISO 178
Flexural Modulus, 2 mm/min	2270	MPa	ISO 178
IMPACT			
Instrumented Impact Energy @ peak, 23°C	45	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	15	J	ASTM D 3763
Instrumented Impact Total Energy, 23°C	53	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	17	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	8	kJ/m²	ISO 180/1A
Charpy -40°C, V-notch Edgew 80*10*3 sp=62mm	12	kJ/m²	ISO 179/1eA
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	25	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	14	kJ/m²	ISO 179/1eA
THERMAL			
CTE, -30°C to 80°C, flow	6.7E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	7.6E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	126	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage, flow, 3.2 mm	0.6 – 0.9	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.6 – 0.9	%	SABIC method
Density	1.19	g/cm³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	28	cm³/10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	265 – 285	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Nozzle Temperature	260 – 275	°C	
Front - Zone 3 Temperature	240 – 270	°C	
Middle - Zone 2 Temperature	250 – 275	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	50 – 80	°C	
Back Pressure	0.3 – 1	MPa	
Screw Speed	30 – 80	rpm	
Shot to Cylinder Size	40 – 80	%	
Vent Depth	0.038 – 0.076	mm	

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