

GELOY™ RESIN XP4034

REGION AMERICAS

DESCRIPTION

PC/ASA. Excellent weatherability.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	25	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	88	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2510	MPa	ASTM D 790
Hardness, Rockwell R	110	-	ASTM D 785
Tensile Stress, yield, 50 mm/min	57	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	126	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	2500	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	320	J/m	ASTM D 256
Izod Impact, notched, -30°C	80	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	47	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	30	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	33	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	7	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	32	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	115	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	104	°C	ASTM D 648
CTE, -20°C to 150°C, flow	7.2E-05	1/°C	ASTM E 831
CTE, -20°C to 150°C, xflow	7.2E-05	1/°C	ASTM E 831
Thermal Conductivity	0.25	W/m-°C	ASTM C177
Vicat Softening Temp, Rate B/50	113	°C	ISO 306



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HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	116	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.15	-	ASTM D 792
Water Absorption, 24 hours	0.25	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm (5)	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm (5)	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 220°C/10.0 kgf	5	g/10 min	ASTM D 1238
Melt Flow Rate, 260°C/5.0 kgf	14	g/10 min	ASTM D 1238
Melt Flow Rate, 280°C/3.8 kgf	24	g/10 min	ASTM D 1238
OPTICAL			
Gloss, untextured, 60 degrees	94	-	ASTM D 523
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94
UV-light, water exposure/immersion	F2	-	UL 746C
INJECTION MOLDING			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	260 – 275	°C	
Nozzle Temperature	245 – 265	°C	
Front - Zone 3 Temperature	250 – 265	°C	
Middle - Zone 2 Temperature	245 – 260	°C	
Rear - Zone 1 Temperature	240 – 255	°C	
Mold Temperature	55 – 70	°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	
SHEET EXTRUSION			
Drying Temperature	90 – 100	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Minimum Moisture Content	0.04	%	
Melt Temperature	260 – 280	°C	
Barrel - Zone 1 Temperature	225 – 240	°C	
Barrel - Zone 2 Temperature	240 – 250	°C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Barrel - Zone 3 Temperature	250 – 260	°C	
Barrel - Zone 4 Temperature	260 – 270	°C	
Adapter Temperature	260 – 270	°C	
Die Temperature	260 – 270	°C	
Roll Stack Temp - Top	100 – 120	°C	
Roll Stack Temp - Middle	95 – 110	°C	
Roll Stack Temp - Bottom	75 – 90	°C	

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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