



GELOY™ Resin XP4025
Americas: COMMERCIAL

PC/ASA. Excellent weatherability.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	600	kgf/cm ²	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	890	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	26300	kgf/cm ²	ASTM D 790
Hardness, Rockwell R	114	-	ASTM D 785
Tensile Stress, yield, 50 mm/min	58	MPa	ISO 527
Tensile Stress, break, 50 mm/min	44	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.1	%	ISO 527
Tensile Strain, break, 50 mm/min	64	%	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	17	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	6	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	397	cm-kgf	ASTM D 3763
Instrumented Impact Total Energy, -30°C	345	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	21	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	37	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	102	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	90	°C	ASTM D 648



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THERMAL			
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 C 177
Vicat Softening Temp, Rate B/50	109	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	107	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	93	°C	ISO 75/Af
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
Specific Gravity	1.14	-	ASTM D 792
Water Absorption, 24 hours	0.24	%	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	6.7	g/10 min	ASTM D 1238
Melt Flow Rate, 260°C/5.0 kgf	18	g/10 min	ASTM D 1238
Melt Flow Rate, 280°C/3.8 kgf	31	g/10 min	ASTM D 1238
OPTICAL			
Gloss, untextured, 60 degrees	90	-	ASTM D 523
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94



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• May be used in co-extrusion or monolayer.

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	255 - 270	°C
Nozzle Temperature	240 - 255	°C
Front - Zone 3 Temperature	245 - 260	°C
Middle - Zone 2 Temperature	240 - 255	°C
Rear - Zone 1 Temperature	230 - 250	°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	255 - 270	°C
Barrel - Zone 1 Temperature	220 - 230	°C
Barrel - Zone 2 Temperature	230 - 245	°C
Barrel - Zone 3 Temperature	245 - 255	°C
Barrel - Zone 4 Temperature	255 - 265	°C
Adapter Temperature	255 - 265	°C
Die Temperature	255 - 265	°C
Roll Stack Temp - Top	100 - 120	°C
Roll Stack Temp - Middle	95 - 110	°C



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Sheet Extrusion Roll Stack Temp - Bottom	75 - 90	°C