

Geloy* Resin XP4025

Americas: COMMERCIAL

ASA+PC blend. Weatherable, injection grade. Available in a wide range of colors and is recommended for unpainted exterior applications.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	59	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	2580	MPa	ASTM D 790
Hardness, Rockwell R	114	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	170	J/m	ASTM D 256
Izod Impact, notched, -30°C	64	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	37	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	33	J	ASTM D 3763
THERMAL	Value	Unit	Standard
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
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
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	Value	Unit	Standard
Specific Gravity	1.14	-	ASTM D 792
Water Absorption, 24 hours	0.24	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 260°C/5.0 kgf	18	g/10 min	ASTM D 1238
OPTICAL	Value	Unit	Standard
Gloss, untextured, 60 degrees	90	-	ASTM D 523
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94

Source GMD, last updated:01/05/2000

Processing

- May be used in co-extrusion or monolayer.

Parameter	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
Parameter		
Sheet Extrusion	Value	Unit
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
Roll Stack Temp - Bottom	75 - 90	°C

Source GMD, last updated:01/05/2000

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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