

Geloy* Resin XP4020R

Americas: COMMERCIAL

ASA+PC may contain up to 20% post-industrial recycle. Excellent flow, weatherability, toughness and high heat for exterior uses.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	44	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	3.7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	36	%	ASTM D 638
Tensile Modulus, 50 mm/min	3030	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	86	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2550	MPa	ASTM D 790
Hardness, Rockwell R	111	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	304	J/m	ASTM D 256
Izod Impact, notched, -30°C	69	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	33	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	22	J	ASTM D 3763
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	121	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	106	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	90	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.1E-05	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.13	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Melt Flow Rate, 220°C/10.0 kgf	10	g/10 min	ASTM D 1238
Melt Flow Rate, 230°C/3.8 kgf	21.6	g/10 min	ASTM D 1238
OPTICAL	Value	Unit	Standard
Gloss, untextured, 60 degrees	98	-	ASTM D 523
FLAME CHARACTERISTICS	Value	Unit	Standard
FMVSS Burning Speed, thickness 1 mm	39	mm/min	FMVSS 302

Source GMD, last updated:09/20/1999

Processing

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

Source GMD, last updated:09/20/1999

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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