

# GELOYTM RESIN XP4020R

## **REGION ASIA**

## **DESCRIPTION**

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

## **TYPICAL PROPERTY VALUES**

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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			
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			
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			
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			
Gloss, untextured, 60 degrees	98	-	ASTM D 523
FLAME CHARACTERISTICS			
FMVSS Burning Speed, thickness 1 mm	39	mm/min	FMVSS 302
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	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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