

GELOY™ RESIN CR7520

REGION ASIA

DESCRIPTION

ASA. Profile and Sheet. Excellent weatherability, good flow/aesthetics and high impact.

TYPICAL PROPERTY VALUES

Revision 20190920

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	41	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	34	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	40	%	ASTM D638
Tensile Modulus, 50 mm/min	1790	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	58	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1790	MPa	ASTM D790
Hardness, Rockwell R	86	-	ASTM D785
IMPACT			
Izod Impact, notched, 23°C	320	J/m	ASTM D256
Izod Impact, notched, -30°C	58	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	25	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	99	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	87	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D648
HDT, 1.82 MPa, annealed	95	°C	ASTM D648
HDT, 0.45 MPa, 6.4 mm, unannealed	90	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	79	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.64E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	9.18E-05	1/°C	ASTM E831
CTE, -30°C to 0°C, flow	8.46E-05	1/°C	ASTM E831
CTE, 0°C to 100°C, flow	9.E-05	1/°C	ASTM E831
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	1.06	-	ASTM D792
Water Absorption, (23°C/Saturated)	0.55	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 220°C/10.0 kgf	7	g/10 min	ASTM D1238
Melt Flow Rate, 260°C/5.0 kgf	13	g/10 min	ASTM D1238
OPTICAL			
Gloss, untextured, 60 degrees	95	-	ASTM D523
ELECTRICAL			
Surface Resistivity	>1.E+15	Ω	ASTM D257

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dielectric Strength, in oil, 3.2 mm	15.9	kV/mm	ASTM D149
Relative Permittivity, 50/60 Hz	5.2	-	ASTM D150
Relative Permittivity, 1 MHz	3.21	-	ASTM D150
Dissipation Factor, 50/60 Hz	0.15	-	ASTM D150
Dissipation Factor, 1 MHz	0.026	-	ASTM D150
Hot Wire Ignition {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Yellow Card Link	E207780-100072245	-	-
UL Recognized, 94HB Flame Class Rating	1.47	mm	UL 94
UV-light, water exposure/immersion	F2	-	UL 746C
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	3 – 6	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	240 – 270	°C	
Nozzle Temperature	240 – 270	°C	
Front - Zone 3 Temperature	240 – 270	°C	
Middle - Zone 2 Temperature	225 – 260	°C	
Rear - Zone 1 Temperature	220 – 250	°C	
Mold Temperature	55 – 75	°C	
Back Pressure	0.7 – 1.4	MPa	
Screw Speed	30 – 80	rpm	
Shot to Cylinder Size	40 – 80	%	
Vent Depth	0.038 – 0.076	mm	

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