

GELOY™ RESIN CR7020

REGION ASIA

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	41	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	34	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	40	%	ASTM D 638
Tensile Modulus, 50 mm/min	1790	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	58	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1790	MPa	ASTM D 790
Hardness, Rockwell R	86	-	ASTM D 785
IMPACT			
Izod Impact, notched, 23°C	320	J/m	ASTM D 256
Izod Impact, notched, -30°C	58	J/m	ASTM D 256
Gardner Impact (Procedure B)	10675	J/m	ASTM D 4226
Instrumented Impact Total Energy, 23°C	25	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	99	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	87	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D 648
HDT, 1.82 MPa, annealed	95	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	90	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	79	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.64E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.18E-05	1/°C	ASTM E 831
CTE, -30°C to 0°C, flow	8.46E-05	1/°C	ASTM E 831
CTE, 0°C to 100°C, flow	9.E-05	1/°C	ASTM E 831
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 D 792
Water Absorption, equilibrium, 23C	0.55	%	ASTM D 570
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 D 1238
Melt Flow Rate, 260°C/5.0 kgf	13	g/10 min	ASTM D 1238
OPTICAL			
Gloss, untextured, 60 degrees	95	-	ASTM D 523
ELECTRICAL			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	>1.E+15	Ohm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	15.9	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	5.2	-	ASTM D 150
Relative Permittivity, 1 MHz	3.21	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.15	-	ASTM D 150
Dissipation Factor, 1 MHz	0.026	-	ASTM D 150
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 Recognized, 94HB Flame Class Rating	1.49	mm	UL 94
UV-light, water exposure /immersion	F2	-	UL 746C
PROFILE EXTRUSION			
Drying Temperature	80 – 90	°C	
Drying Time	3 – 6	hrs	
Drying Time (Cumulative)	12	hrs	
Minimum Moisture Content	0.02	%	
Melt Temperature	225 – 255	°C	
Barrel - Zone 1 Temperature	205 – 215	°C	
Barrel - Zone 2 Temperature	215 – 230	°C	
Barrel - Zone 3 Temperature	220 – 240	°C	
Barrel - Zone 4 Temperature	225 – 245	°C	
Adapter Temperature	225 – 245	°C	
Die Temperature	225 – 245	°C	
Calibrator Temperature	15 – 65	°C	

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