

Geloy* Resin CR7520

Americas: COMMERCIAL

ASA copolymer. Automotive grilles and exteriors. Excellent weatherability, good flow/aesthetics and high impact. Rated f2 by UL.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
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			
	Value	Unit	Standard
Izod Impact, notched, 23°C	320	J/m	ASTM D 256
Izod Impact, notched, -30°C	58	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	25	J	ASTM D 3763
THERMAL			
	Value	Unit	Standard
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			
	Value	Unit	Standard
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			
	Value	Unit	Standard
Gloss, untextured, 60 degrees	95	-	ASTM D 523
ELECTRICAL			
	Value	Unit	Standard
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	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94
UV-light, water exposure/immersion	F2	-	UL 746C

Source GMD, last updated:03/29/1999

Processing

Parameter	Value	Unit
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

Source GMD, last updated:03/29/1999

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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