

SABIC Innovative Plastics GELOY CR7520 ASA (North America)

Categories: [Polymer](#); [Thermoplastic](#); [ASA Polymer](#)

Material Notes: Information provided by GE Plastics for their North American product line. MatWeb has a separate entry for the European data sheet.

Saudi Basic Industries Corporation (SABIC) announced on August 31st, 2007, the completion of its purchase of GE Plastics.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.06 g/cc	0.0383 lb/in³	ASTM D 792
Water Absorption at Saturation	0.550 %	0.550 %	Equilibrium, 73F; ASTM D 570
Linear Mold Shrinkage	0.00500 - 0.00700 cm/cm	0.00500 - 0.00700 in/in	Flow, 0.125 inch; ASTM D 955
Melt Flow	7.00 g/10 min	7.00 g/10 min	220C/10.0 kgf; ASTM D 1238
	13.0 g/10 min	13.0 g/10 min	260C/5.0 kgf; ASTM D 1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	86	86	ASTM D 785
Tensile Strength at Break	34.5 MPa	5000 psi	Type I, 2.0 in/min; ASTM D 638
Tensile Strength, Yield	41.4 MPa	6000 psi	Type I, 2.0 in/min; ASTM D 638
Elongation at Break	40.0 %	40.0 %	Type I, 2.0 in/min; ASTM D 638
Tensile Modulus	1.79 GPa	260 ksi	2.0 in/min; ASTM D 638
Flexural Modulus	1.79 GPa	260 ksi	0.05 in/min, 2" span; ASTM D 790
Flexural Yield Strength	58.6 MPa	8500 psi	0.05 in/min, 2" span; ASTM D 790
Gardner Impact	25.4 J	18.7 ft-lb	Instrumented Impact Total Energy; ASTM D 3763
	@Temperature 22.8 °C	@Temperature 73.0 °F	
Izod Impact, Notched	3.20 J/cm	6.00 ft-lb/in	73F; ASTM D 256
Izod Impact, Notched, Low Temp	0.587 J/cm	1.10 ft-lb/in	at -22F; ASTM D 256

Electrical Properties	Metric	English	Comments
Surface Resistivity per Square	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ASTM D 257
Dielectric Constant 	3.21	3.21	ASTM D 150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	5.20	5.20	ASTM D 150
	@Frequency 50 Hz	@Frequency 50 Hz	
Dielectric Strength	16.0 kV/mm	406 kV/in	in oil, 125 mils; ASTM D 149
Dissipation Factor 	0.0260	0.0260	ASTM D 150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	0.150	0.150	ASTM D 150
	@Frequency 50 Hz	@Frequency 50 Hz	
Comparative Tracking Index	>= 600 V	>= 600 V	(+/- 0.125 inch); PLC Code 0; UL 746A
Hot Wire Ignition, HWI	15.0 - 30.0 sec	15.0 - 30.0 sec	(+/- 0.125 inch); PLC Code 3; UL 746A
High Amp Arc Ignition, HAI	>= 120 arcs	>= 120 arcs	Surface (+/- 0.125 inch); PLC Code 0; UL 746A

Thermal Properties	Metric	English	Comments
CTE, linear 	84.6 µm/m-°C	47.0 µin/in-°F	Flow Direction; ASTM E 831
	@Temperature -30.0 - 0.000 °C	@Temperature -22.0 - 32.0 °F	
	86.4 µm/m-°C	48.0 µin/in-°F	Flow Direction; ASTM E 831
	@Temperature -40.0 - 37.8 °C	@Temperature -40.0 - 100 °F	
	90.0 µm/m-°C	50.0 µin/in-°F	Flow Direction; ASTM E 831
	@Temperature 0.000 - 100 °C	@Temperature 32.0 - 212 °F	
CTE, linear, Transverse to Flow	91.8 µm/m-°C	51.0 µin/in-°F	ASTM E 831
	@Temperature -40.0 - 37.8 °C	@Temperature -40.0 - 100 °F	
Deflection Temperature at 0.46 MPa (66 psi)	87.8 °C	190 °F	0.125 inch, unannealed; ASTM D 648
	90.6 °C	195 °F	0.250 inch, unannealed; ASTM D 648
Deflection Temperature at 1.8 MPa (264 psi)	76.7 °C	170 °F	0.125 inch, unannealed; ASTM D 648
	79.4 °C	175 °F	0.250 inch, unannealed; ASTM D 648
	95.6 °C	204 °F	0.250 inch, annealed; ASTM D 648
Vicat Softening Point	99.4 °C	211 °F	Rate B; ASTM D 1525
UL RTI, Electrical	50.0 °C	122 °F	UL 746B
UL RTI, Mechanical with Impact	50.0 °C	122 °F	UL 746B
UL RTI, Mechanical without Impact	50.0 °C	122 °F	UL 746B
Flammability, UL94	HB	HB	0.058 in.

Optical Properties	Metric	English	Comments
Gloss	95.0 %	95.0 %	Untextured, 60 degrees; ASTM D 523

Descriptive Properties

UL File Number, USA	E121562
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Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's disclaimer and terms of use regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.