



GELOY™ Resin CR7500
Americas: COMMERCIAL

ASA, excellent weatherable, injection molding

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	400	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	330	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	60	%	ASTM D 638
Tensile Modulus, 5 mm/min	20000	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	690	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	22100	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	43	MPa	ISO 527
Tensile Stress, break, 5 mm/min	35	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.3	%	ISO 527
Tensile Strain, break, 5 mm/min	19	%	ISO 527
Tensile Modulus, 1 mm/min	2040	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	64	MPa	ISO 178
Flexural Modulus, 2 mm/min	2060	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	40	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	6	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	305	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	14	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D 1525



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THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	90	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.4E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, approximate maximum	98	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	102	°C	ISO 306
Vicat Softening Temp, Rate B/120	105	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	88	°C	ISO 75/Ae
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	89	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.08	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.5 - 0.8	%	SABIC Method
Melt Flow Rate, 220°C/10.0 kgf	6.3	g/10 min	ASTM D 1238
Melt Flow Rate, 260°C/5.0 kgf	11	g/10 min	ASTM D 1238
Density	1.07	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 220°C/10.0 kg	6	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 260°C/5.0 kg	10	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	85 - 95	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	255 - 270	°C
Nozzle Temperature	235 - 255	°C
Front - Zone 3 Temperature	245 - 260	°C
Middle - Zone 2 Temperature	235 - 255	°C
Rear - Zone 1 Temperature	230 - 250	°C
Mold Temperature	60 - 85	°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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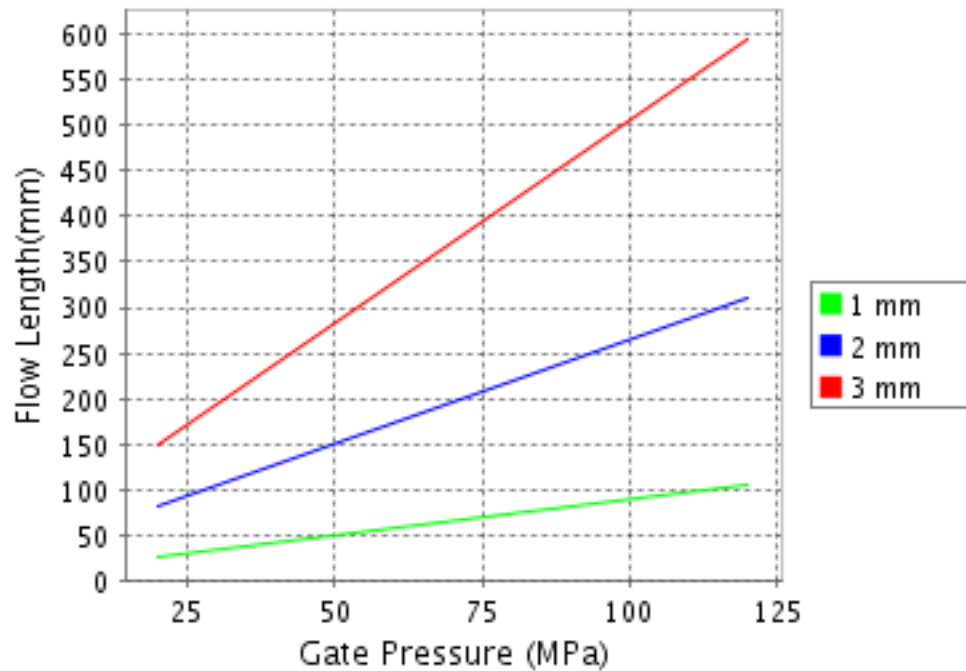
CALCULATED FLOW LENGTH INDICATION

Moldflow® Radial Flow Analysis

GELOY® CR7500

Melt Temperature : 265°C

Mold Temperature : 80°C



Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.

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