

Celanese Hostaform[®] C 9021 GV1/20 XGM

Chemical abbreviation according to ISO 1043-1: POM
Information provided by Celanese

Physical Properties	Metric	English	Comments
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Density	1.57 g/cc	0.0567 lb/in ³	ISO 1183
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Melt Flow	4.0 g/10 min @Load 2.16 kg, Temperature 190 °C	4.0 g/10 min @Load 4.76 lb, Temperature 374 °F	[cm ³ /10min]; ISO 1133
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Mechanical Properties	Metric	English	Comments
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Tensile Strength at Break	100 MPa	14500 psi	5mm/min; ISO 527-2/1A
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Elongation at Break	2.5 %	2.5 %	5mm/min; ISO 527-2/1A
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Tensile Modulus	7.70 GPa	1120 ksi	50mm/min; ISO 527-2/1A
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Flexural Modulus	7.40 GPa	1070 ksi	ISO 178
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Charpy Impact, Notched	0.550 J/cm ²	2.62 ft-lb/in ²	ISO 179/1eA
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	0.550 J/cm ² @Temperature -30.0 °C	2.62 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
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Thermal Properties	Metric	English	Comments
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CTE, linear, Parallel to Flow	30.0 µm/m-°C	16.7 µin/in-°F	ISO 11359-2
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CTE, linear, Transverse to Flow	90.0 µm/m-°C	50.0 µin/in-°F	ISO 11359-2
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Melting Point	166 °C	331 °F	10°C/min; ISO 11357-1,-2,-3
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Processing Properties	Metric	English	Comments
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Processing Temperature	80.0 - 120 °C	176 - 248 °F	cavity
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	190 - 210 °C	374 - 410 °F	hot runner
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Feed Temperature	60.0 - 80.0 °C	140 - 176 °F	
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Zone 1	170 - 180 °C	338 - 356 °F	
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Zone 2	180 - 190 °C	356 - 374 °F	
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Zone 3	190 - 200 °C	374 - 392 °F
Zone 4	190 - 210 °C	374 - 410 °F
Die Temperature	190 - 210 °C	374 - 410 °F
Melt Temperature	190 - 210 °C	374 - 410 °F
Drying Temperature	100 - 120 °C	212 - 248 °F
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour
Moisture Content	<= 0.15 %	<= 0.15 %
Injection Pressure	60.0 - 120 MPa	8700 - 17400 psi
Hold Pressure	60.0 - 120 MPa	8700 - 17400 psi
Back Pressure	<= 2.00 MPa	<= 290 psi
Screw Speed	70 rpm @Diameter 55.0 mm	70 rpm @Diameter 2.17 in
	100 rpm @Diameter 40.0 mm	100 rpm @Diameter 1.57 in
	150 rpm @Diameter 25.0 mm	150 rpm @Diameter 0.984 in

Descriptive Properties	
Injection molding	Yes
Injection speed	slow
Processing conditions acc. ISO	9988