

Celanese Hostaform® C 9021 GV1/20

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

Physical Properties	Metric	English	Comments
Density	1.57 g/cc	0.0567 lb/in ³	ISO 1183
Water Absorption at Saturation	0.85 %	0.85 %	ISO 62
Melt Flow	4.5 g/10 min @Load 2.16 kg, Temperature 190 °C	4.5 g/10 min @Load 4.76 lb, Temperature 374 °F	[cm ³ /10min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	120 MPa	17400 psi	5mm/min; ISO 527-2/1A
Elongation at Break	3.0 %	3.0 %	5mm/min; ISO 527-2/1A
Tensile Modulus	7.20 GPa	1040 ksi	50mm/min; ISO 527-2/1A
Flexural Modulus	6.90 GPa	1000 ksi	ISO 178
Charpy Impact Unnotched	3.50 J/cm ²	16.7 ft-lb/in ²	ISO 179/1eU
Charpy Impact, Notched	4.00 J/cm ² @Temperature -30.0 °C	19.0 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179/1eA
Tensile Creep Modulus, 1 hour	0.800 J/cm ² @Temperature -30.0 °C	3.81 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	6500 MPa	943000 psi	ISO 899-1
Tensile Creep Modulus, 1000 hours	4000 MPa	580000 psi	ISO 899-1

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 60093
Dielectric Constant	4.3 @Frequency 1e+6 Hz	4.3 @Frequency 1e+6 Hz	IEC 60250
	4.3 @Frequency 100 Hz	4.3 @Frequency 100 Hz	IEC 60250
Dielectric Strength	35.0 kV/mm	889 kV/in	IEC 60243-1
Dissipation Factor	0.0030 @Frequency 100 Hz	0.0030 @Frequency 100 Hz	IEC 60250
	0.0060 @Frequency 1e+6 Hz	0.0060 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	50.0 µm/m-°C	27.8 µin/in-°F	ISO 11359-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C	44.4 µin/in-°F	ISO 11359-2
Melting Point	166 °C	331 °F	10°C/min; ISO 11357-1,-2,-3
Deflection Temperature at 1.8 MPa (264 psi)	159 °C	318 °F	ISO 75-1, -2
Deflection Temperature at 8.0 MPa	105 °C	221 °F	ISO 75-1, -2
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	
	HB @Thickness 3.00 mm	HB @Thickness 0.118 in	