

Celanese Hostaform® C 13031

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

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in ³	ISO 1183
Water Absorption at Saturation	0.65 %	0.65 %	ISO 62
Linear Mold Shrinkage, Flow	0.020 cm/cm	0.020 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.018 cm/cm	0.018 in/in	ISO 294-4
Melt Flow	12 g/10 min @Load 2.16 kg, Temperature 190 °C	12 g/10 min @Load 4.76 lb, Temperature 374 °F	[cm ³ /10min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	68.0 MPa	9860 psi	50mm/min; ISO 527-2/1A
Elongation at Break	20 %	20 %	
Elongation at Yield	8.0 %	8.0 %	50mm/min; ISO 527-2/1A
Tensile Modulus	3.05 GPa	442 ksi	50mm/min; ISO 527-2/1A
Flexural Modulus	3.00 GPa	435 ksi	ISO 178
Charpy Impact Unnotched	12.0 J/cm ²	57.1 ft-lb/in ²	ISO 179/1eU
	12.0 J/cm ² @Temperature -30.0 °C	57.1 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	0.670 J/cm ²	3.19 ft-lb/in ²	ISO 179/1eA
	0.600 J/cm ² @Temperature -30.0 °C	2.86 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
Tensile Creep Modulus, 1 hour	2750 MPa	399000 psi	ISO 899-1
Tensile Creep Modulus, 1000 hours	1450 MPa	210000 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	4.0 @Frequency 1e+6 Hz	4.0 @Frequency 1e+6 Hz	IEC 60250
	4.0 @Frequency 100 Hz	4.0 @Frequency 100 Hz	IEC 60250
Dielectric Strength	35.0 kV/mm	889 kV/in	IEC 60243-1
Dissipation Factor	0.0020 @Frequency 100 Hz	0.0020 @Frequency 100 Hz	IEC 60250
	0.0050 @Frequency 1e+6 Hz	0.0050 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112