

# BASF Ultraform® N2640 E2 POM

Description: Is a POM + MBS, elastomer-modified injection-molding grade with enhanced toughness and high weld line strength.  
Information provided by BASF

Physical Properties	Metric	English	Comments
Density	1.34 g/cc	0.0484 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C; 50% RH; ISO 62
Water Absorption at Saturation	0.90 %	0.90 %	ISO 62
Linear Mold Shrinkage, Flow	0.019 cm/cm	0.019 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.019 cm/cm	0.019 in/in	ISO 2577
Melt Flow	6.8 g/10 min @Load 2.16 kg, Temperature 190 °C	6.8 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	105 MPa @Load 36.5 kg, Time 30.0 sec	15200 psi @Load 80.5 lb, Time 0.00833 hour	ISO 2039-1
Tensile Strength, Yield	50.0 MPa	7250 psi	50 mm/min; ISO 527-2
Elongation at Break	50 %	50 %	Nominal, 50 mm/min; ISO 527-2
Elongation at Yield	7.8 %	7.8 %	50 mm/min; ISO 527-2
Modulus of Elasticity	2.20 GPa	319 ksi	ISO 527-2
Charpy Impact, Notched	0.650 J/cm <sup>2</sup> @Temperature -30.0 °C	3.09 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eA
	0.900 J/cm <sup>2</sup> @Temperature 23.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eA

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	IEC 60093
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	IEC 60093
Dielectric Constant	3.5 @Frequency 1e+6 Hz	3.5 @Frequency 1e+6 Hz	IEC 60250
	3.6 @Frequency 100 Hz	3.6 @Frequency 100 Hz	IEC 60250
Dielectric Strength	42.0 kV/mm	1070 kV/in	IEC 60243-1
Dissipation Factor	0.0030 @Frequency 100 Hz	0.0030 @Frequency 100 Hz	IEC 60250
	0.0080 @Frequency 1e+6 Hz	0.0080 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	Test solution A; IEC 60112
	600 V	600 V	Test solution B; IEC 60112