

BASF Ultraform® N2640 E4 POM

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

Physical Properties	Metric	English	Comments
Density	1.30 g/cc	0.0470 lb/in ³	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	0.018 cm/cm	0.018 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.018 cm/cm	0.018 in/in	ISO 2577
Melt Flow	3.9 g/10 min @Load 2.16 kg, Temperature 190 °C	3.9 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	88.0 MPa @Load 36.5 kg, Time 30.0 sec	12800 psi @Load 80.5 lb, Time 0.00833 hour	ISO 2039-1
Tensile Strength, Yield	40.0 MPa	5800 psi	50 mm/min; ISO 527-2
Elongation at Break	>= 50 %	>= 50 %	Nominal, 50 mm/min; ISO 527-2
Elongation at Yield	7.3 %	7.3 %	50 mm/min; ISO 527-2
Modulus of Elasticity	1.70 GPa	247 ksi	ISO 527-2
Charpy Impact Unnotched	24.0 J/cm ² @Temperature -30.0 °C	114 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.850 J/cm ² @Temperature -30.0 °C	4.04 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	1.50 J/cm ² @Temperature 23.0 °C	7.14 ft-lb/in ² @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	3.4 @Frequency 1e+6 Hz	3.4 @Frequency 1e+6 Hz	IEC 60250
	3.5 @Frequency 100 Hz	3.5 @Frequency 100 Hz	IEC 60250
Dielectric Strength	37.0 kV/mm	940 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