

INEOS Styrolution® P2MC

Novodur® P2MC is an injection molding grade especially suitable for electroplating, providing high flowability. Electroplating grade, High flowability, Good impact resistance. Applications: Automotive grills, Automotive trim, Household appliances, Various Sanitary Appliances

Information provided by Styrolution.

Physical Properties	Metric	English	Comments
Density	1.03 g/cc	0.0372 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ISO 294-4
Melt Flow	25 g/10 min @Load 10.0 kg, Temperature 220 °C	25 g/10 min @Load 22.0 lb, Temperature 428 °F	Volumetric; cm ³ /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	90.0 MPa	13100 psi	ISO 2039-1
Tensile Strength, Yield	40.0 MPa	5800 psi	ISO 527
Elongation at Break	>= 15 %	>= 15 %	ISO 527
Elongation at Yield	2.4 %	2.4 %	ISO 527
Tensile Modulus	2.20 GPa	319 ksi	ISO 527
Flexural Strength	62.0 MPa	8990 psi	ISO 178
Flexural Modulus	2.10 GPa	305 ksi	ISO 178
Izod Impact, Notched (ISO)	12.0 kJ/m ² @Temperature -30.0 °C	5.71 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
	23.0 kJ/m ² @Temperature 23.0 °C	10.9 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact, Notched	1.40 J/cm ² @Temperature -30.0 °C	6.66 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	2.40 J/cm ² @Temperature 23.0 °C	11.4 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	IEC 60093
Dielectric Constant	2.9 @Frequency 1e+6 Hz	2.9 @Frequency 1e+6 Hz	IEC 60250
	3.0 @Frequency 100 Hz	3.0 @Frequency 100 Hz	IEC 60250
Dielectric Strength	37.0 kV/mm	940 kV/in	Short time, 1.5 mm; IEC 60243-1
Dissipation Factor	0.0050 @Frequency 100 Hz	0.0050 @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	IEC 60112