

KEP Kepital[®] F40-03

Extremely easy-flowing grade for injection molding for thin walled precision parts. F40-03 provides the best flow-ability in injection molding.

Information provided by KEP Americas.

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in ³	ISO 1183
Water Absorption	0.20 %	0.20 %	ISO 62
Linear Mold Shrinkage, Flow	0.020 cm/cm	0.020 in/in	t = 3 mm
Melt Flow	52 g/10 min @Load 2.16 kg, Temperature 190 °C	52 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength	65.0 MPa	9430 psi	50 mm/min; ISO 527
Elongation at Break	20 %	20 %	50 mm/min; ISO 527
Elongation at Yield	8.0 %	8.0 %	50 mm/min; ISO 527
Flexural Strength	93.0 MPa	13500 psi	ISO 178
Flexural Modulus	2.75 GPa	399 ksi	ISO 178
Charpy Impact, Notched	0.500 J/cm ²	2.38 ft-lb/in ²	ISO 179

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	IEC 60093
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	IEC 60093
Dielectric Strength	19.0 kV/mm	483 kV/in	IEC 60243

Thermal Properties	Metric	English	Comments
CTE, linear	120 µm/m-°C	66.7 µin/in-°F	ISO 11359
Melting Point	165 °C	329 °F	ISO 3146
Deflection Temperature at 1.8 MPa (264 psi)	101 °C	214 °F	ISO 75