

# Kolon KOCETAL<sup>®</sup> K500

General injection molding grade. Easy flow grade for hard-to fill molds and mechanical thin-wall parts.  
Applications: General injection molding products.

Physical Properties	Metric	English	Comments
Specific Gravity	1.41 g/cc	1.41 g/cc	ASTM D792
Moisture Absorption at Equilibrium	0.22 %	0.22 %	60% RH; ASTM D570
Linear Mold Shrinkage	0.020 cm/cm	0.020 in/in	ASTM D955
Melt Flow	14 g/10 min	14 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	80	80	ASTM D785
Tensile Strength	65.0 MPa	9430 psi	ASTM D638
Elongation at Break	50 %	50 %	ASTM D638
Flexural Strength	96.0 MPa	13900 psi	ASTM D790
Flexural Modulus	2.60 GPa	377 ksi	ASTM D790
Izod Impact, Notched	0.610 J/cm	1.14 ft-lb/in	ASTM D256

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	ASTM D257
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	ASTM D257
Dielectric Constant	3.7	3.7	ASTM D150
Dielectric Strength	19.0 kV/mm	483 kV/in	ASTM D149
Dissipation Factor	0.0060 @Frequency 1e+6 Hz	0.0060 @Frequency 1e+6 Hz	ASTM D150

Thermal Properties	Metric	English	Comments
CTE, linear	130 $\mu$ m/m-°C	72.2 $\mu$ in/in-°F	ASTM D696
Melting Point	166 °C	331 °F	ASTM D1525
Deflection Temperature at 0.46 MPa (66 psi)	158 °C	316 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	110 °C	230 °F	ASTM D648
Vicat Softening Point	162 °C	324 °F	ASTM D1525
Flammability, UL94	HB	HB	