

**Kocetal® K100**

POM

Kolon Industries

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt flow index, MFI	<b>3</b>	g/10min	ISO 1133
Temperature	<b>190</b>	°C	-
Load	<b>2.16</b>	kg	-
Molding shrinkage, parallel	<b>2.2</b>	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Melt Flow Index, MFI	<b>2.5</b>	g/10min	ASTM D 1238
Temperature	<b>190</b>	°C	-
Load	<b>2.16</b>	kg	-
Mold Shrinkage, MD	<b>0.022</b>	mm/mm	ASTM D 955
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Strength	<b>60</b>	MPa	ISO 527
Strain at break	<b>44</b>	%	ISO 527
Flexural modulus, 23°C	<b>2450</b>	MPa	ISO 178
Charpy notched impact strength, +23°C	<b>7.3</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Rockwell hardness	<b>M 78</b>	-	ISO 2039-2
<b>ASTM Data</b>			
Tensile Strength	<b>57</b>	MPa	ASTM D 638
Elongation at Break	<b>80</b>	%	ASTM D 638
Flexural Modulus	<b>2200</b>	MPa	ASTM D 790
Flexural Strength	<b>80</b>	MPa	ASTM D 790
Rockwell Hardness	<b>M 78</b>	-	ASTM D 785
Izod Impact notched, 1/8 in	<b>87</b>	J/m	ASTM D 256
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	<b>165</b>	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	<b>95</b>	°C	ISO 75-1/-2
<b>ASTM Data</b>			
UL 94 Flame rating	<b>HB</b>	-	UL 94
Thickness tested	<b>0.8</b>	mm	-
Coefficient of Thermal Expansion, MD	<b>130</b>	E-6/K	ASTM D 696
DTUL @ 66 psi	<b>158</b>	°C	ASTM D 648
DTUL @ 264 psi	<b>110</b>	°C	ASTM D 648
Melting Temperature	<b>166</b>	°C	ASTM D 3418
Vicat Temperature	<b>162</b>	°C	ASTM D 1525
<b>Electrical properties</b>			
<b>ISO Data</b>			
Volume resistivity	<b>1E12</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>&gt;1E15</b>	Ohm	IEC 62631-3-2
Electric strength	<b>19</b>	kV/mm	IEC 60243-1
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>19</b>	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	<b>0.006</b>	-	ASTM D 150
Surface Resistivity	<b>&gt;1E15</b>	Ohm	ASTM D 257
Volume Resistivity	<b>1E14</b>	Ohm*cm	ASTM D 257
<b>Other properties</b>			
Density	<b>1410</b>	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	<b>0.22</b>	%	ASTM D 570
Density	<b>1410</b>	kg/m <sup>3</sup>	ASTM D 792

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<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>80 - 90</b>	°C	-
Pre-drying - Time	<b>3</b>	h	-
Melt temperature	<b>≤220</b>	°C	-
Mold temperature	<b>60 - 80</b>	°C	-
Zone 1	<b>180</b>	°C	-
Zone 2	<b>190</b>	°C	-
Zone 3	<b>190</b>	°C	-
Nozzle temperature	<b>200</b>	°C	-

**Characteristics****Processing**

Injection Molding, Other Extrusion

**Regional Availability**

North America, Asia Pacific