

Kocetal® K500

POM

Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	14	g/10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	14	g/10min	ASTM D 1238
Temperature	190	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.02	mm/mm	ASTM D 955
Mechanical properties			
ISO Data			
Tensile Strength	65	MPa	ISO 527
Strain at break	30	%	ISO 527
Flexural modulus, 23°C	2800	MPa	ISO 178
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Rockwell hardness	M 80	-	ISO 2039-2
ASTM Data			
Tensile Strength	65	MPa	ASTM D 638
Elongation at Break	50	%	ASTM D 638
Flexural Modulus	2600	MPa	ASTM D 790
Flexural Strength	96	MPa	ASTM D 790
Rockwell Hardness	M 80	-	ASTM D 785
Izod Impact notched, 1/8 in	61	J/m	ASTM D 256
Thermal properties			
ISO Data			
Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	95	°C	ISO 75-1/-2
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.8	mm	-
Coefficient of Thermal Expansion, MD	130	E-6/K	ASTM D 696
DTUL @ 66 psi	158	°C	ASTM D 648
DTUL @ 264 psi	110	°C	ASTM D 648
Melting Temperature	166	°C	ASTM D 3418
Vicat Temperature	162	°C	ASTM D 1525
Electrical properties			
ISO Data			
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	19	kV/mm	IEC 60243-1
ASTM Data			
Dielectric Strength, Short Time	19	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.006	-	ASTM D 150
Dielectric Constant, 1 MHz	3.7	-	ASTM D 150
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	1E14	Ohm*cm	ASTM D 257
Other properties			
Density	1410	kg/m ³	ISO 1183
Water Absorption, 24hr	0.22	%	ASTM D 570
Density	1410	kg/m ³	ASTM D 792

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

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Asia Pacific