

KOPA® KN171

PA6

Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.015	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Strength	70	MPa	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Charpy notched impact strength, +23°C	7	kJ/m ²	ISO 179/1eA
Rockwell hardness	R 119	-	ISO 2039-2

ASTM Data			
Tensile Strength	80	MPa	ASTM D 638
Flexural Modulus	2942	MPa	ASTM D 790
Flexural Strength	128	MPa	ASTM D 790
Rockwell Hardness	R 120	-	ASTM D 785
Izod Impact notched, 1/8 in	74	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	60	°C	ISO 75-1/-2

ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.8	mm	-
Coefficient of Thermal Expansion, MD	80	E-6/K	ASTM D 696
DTUL @ 66 psi	180	°C	ASTM D 648
DTUL @ 264 psi	65	°C	ASTM D 648
Melting Temperature	220	°C	ASTM D 3418

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	20	kV/mm	ASTM D 149
Dielectric Constant, 1 MHz	3.4	-	ASTM D 150
Arc Resistance	120	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Density	1130	kg/m ³	ISO 1183
Water Absorption, 24hr	1.8	%	ASTM D 570
Density	1140	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 100	°C	-
Pre-drying - Time	4 - 5	h	-
Processing humidity	≤0.05	%	-
Mold temperature	60 - 80	°C	-
Zone 1	230	°C	-
Zone 2	240	°C	-
Zone 3	250	°C	-
Nozzle temperature	250	°C	-

Characteristics**Processing**

Injection Molding

Applications

Automotive

Additives

Release agent

Regional Availability

North America, Asia Pacific