

**KOPA® KN173ST3R**

PA6

Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	1.4	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.0145	mm/mm	ASTM D 955
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Strength	40	MPa	ISO 527
Flexural modulus, 23°C	610	MPa	ISO 178
Charpy notched impact strength, +23°C	65	kJ/m <sup>2</sup>	ISO 179/1eA
Rockwell hardness	R 120	-	ISO 2039-2
<b>ASTM Data</b>			
Tensile Strength	46	MPa	ASTM D 638
Flexural Modulus	740	MPa	ASTM D 790
Flexural Strength	36	MPa	ASTM D 790
Rockwell Hardness	R 9	-	ASTM D 785
Izod Impact notched, 1/8 in	637	J/m	ASTM D 256
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	75	°C	ISO 75-1/-2
<b>ASTM Data</b>			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.8	mm	-
Coefficient of Thermal Expansion, MD	100	E-6/K	ASTM D 696
DTUL @ 66 psi	150	°C	ASTM D 648
DTUL @ 264 psi	60	°C	ASTM D 648
Melting Temperature	220	°C	ASTM D 3418
<b>Electrical properties</b>			
<b>ASTM Data</b>			
Dielectric Strength, Short Time	20	kV/mm	ASTM D 149
Dielectric Constant, 1 MHz	3.2	-	ASTM D 150
Arc Resistance	125	s	ASTM D 495
<b>Other properties</b>			
Density	1100	kg/m <sup>3</sup>	ASTM D 792
<b>Processing Recommendation Injection Molding</b>			
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, Other Extrusion

**Applications**

Automotive

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Regional Availability**

North America, Asia Pacific