

Kocetal® UR304

(POM+TPU)

Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	7.5	g/10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	1.7	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	12	g/10min	ASTM D 1238
Temperature	190	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.017	mm/mm	ASTM D 955
Mechanical properties			
ISO Data			
Tensile Strength	45	MPa	ISO 527
Strain at break	>50	%	ISO 527
Flexural modulus, 23°C	1900	MPa	ISO 178
Charpy notched impact strength, +23°C	13	kJ/m ²	ISO 179/1eA
Rockwell hardness	M 76	-	ISO 2039-2
ASTM Data			
Tensile Strength	45	MPa	ASTM D 638
Elongation at Break	140	%	ASTM D 638
Flexural Modulus	1800	MPa	ASTM D 790
Flexural Strength	60	MPa	ASTM D 790
Rockwell Hardness	M 76	-	ASTM D 785
Izod Impact notched, 1/8 in	130	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	72	°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	145	°C	ASTM D 648
DTUL @ 264 psi	82	°C	ASTM D 648
Melting Temperature	166	°C	ASTM D 3418
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
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	1E14	Ohm*cm	ASTM D 257
Other properties			
Density	1360	kg/m ³	ISO 1183
Water Absorption, 24hr	0.25	%	ASTM D 570
Density	1360	kg/m ³	ASTM D 792
Processing Recommendation Injection Molding			
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3	h	-

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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

Special Characteristics

High impact or impact modified