Kocetal® TF304

POM-Z20 Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**6.5**	g/10min	ISO 1133
Temperature	**190**	°C	-
Load	**2.16**	kg	-
Molding shrinkage, parallel	**1.8**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**6.5**	g/10min	ASTM D 1238
Temperature	**190**	°C	-
Load	**2.16**	kg	-
Mold Shrinkage, MD	**0.018**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Strength	**50**	MPa	ISO 527
Strain at break	**20**	%	ISO 527
Flexural modulus, 23°C	**2100**	MPa	ISO 178
Charpy notched impact strength, +23°C	**5.5**	kJ/m²	ISO 179/1eA
Rockwell hardness	**M 70**	-	ISO 2039-2
ASTM Data			
Tensile Strength	**45**	MPa	ASTM D 638
Elongation at Break	**30**	%	ASTM D 638
Flexural Modulus	**2100**	MPa	ASTM D 790
Flexural Strength	**67**	MPa	ASTM D 790
Rockwell Hardness	**M 70**	-	ASTM D 785
Izod Impact notched, 1/8 in	**35**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**166**	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**85**	°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	**156**	°C	ASTM D 648
DTUL @ 264 psi	**106**	°C	ASTM D 648
Melting Temperature	**166**	°C	ASTM D 3418

Electrical properties	Value	Unit	Test Standard
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	Value	Unit	Test Standard
Density	**1510**	kg/m³	ISO 1183
Density	**1510**	kg/m³	ASTM D 792

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

Features
Tribologic Grade