TECACOMP® PK TRM CF20 black 4181



Technical Data

Product Description

Main features

• very good bearing and wear properties

Target Industries

- · automotive industry
- mechanical engineering

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General				
Material Status	Commercial: Active			
Literature ¹	 Technical Datasheet (I Technical Datasheet (I 	English) German)		
Availability	 Asia Pacific 	 Europe 	North America	
Filler / Reinforcement	Carbon Fiber, 20% Filler by Weight			
Features	 Wear Resistant 			
Uses	 Automotive Application 	าร		
Appearance	 Black 			
Forms	 Granules 			
Processing Method	 Injection Molding 			

Physical	Nominal Value Unit	Test Method
Density	1.30 g/cm ³	
Apparent (Bulk) Density	0.57 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	11 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (240°C/2.16 kg)	9.0 cm ³ /10min	ISO 1133
Molding Shrinkage		ISO 294-4
Across Flow	1.1 %	
Flow	0.40 %	
Water Absorption (Equilibrium, 23°C, 50% RH)	0.40 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	12700 MPa	ISO 527-1
Tensile Stress	155 MPa	ISO 527-2
Tensile Strain (Break)	2.0 %	ISO 527-2
Impact	Nominal Value Unit	Test Method
Charpy Unnotched Impact Strength	40 kJ/m²	ISO 179/1eU



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Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ISO 75-2/A
1.8 MPa, Unannealed	213 °C	
Glass Transition Temperature	15.0 °C	DIN 53765
Melting Temperature	220 °C	DIN 53765
CLTE		ISO 11359-2
Flow : 23 to 80°C	5.8E-5 cm/cm/°C	
Transverse : 23 to 80°C	8.8E-5 cm/cm/°C	
Thermal Conductivity		DIN EN 821
3	0.39 W/m/K	
4	0.66 W/m/K	
Service Temperature		
long term	100 °C	
short term	140 °C	
Electrical	Nominal Value Unit	Test Method
Volume Resistivity	7.2E+4 ohms cm	ISO 3915
Flammability	Nominal Value Unit	Test Method
Flammability Classification	НВ	IEC 60695-11-10, -20
Injection	Nominal Value Unit	
Drying Temperature	80 °C	
Drying Time	2.0 to 3.0 hr	
Processing (Melt) Temp	220 to 250 °C	
Mold Temperature	120 °C	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Through-plane

⁴ In-plane



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