

# TECACOMP® PK TRM CF20 black 4181

Polyketone  
Ensinger GmbH

## Technical Data

### Product Description

#### Main features

- very good bearing and wear properties

#### Target Industries

- automotive industry
- mechanical engineering

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a> • <a href="#">Technical Datasheet (German)</a>
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight
Features	• Wear Resistant
Uses	• Automotive Applications
Appearance	• Black
Forms	• Granules
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.30 g/cm <sup>3</sup>	
Apparent (Bulk) Density	0.57 g/cm <sup>3</sup>	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 <sup>3</sup> /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/m <sup>2</sup>	ISO 179/1eU



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# PROSPECTOR®

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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
-- <sup>3</sup>	0.39 W/m/K	
-- <sup>4</sup>	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	HB	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

<sup>1</sup> 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.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> Through-plane

<sup>4</sup> In-plane

