

TECHNICAL DATA



PG20FR-PETG+20%GF

P r o d u c t D e m o n s t r a t i o n

Flame-
retardant
Material



■ Material Overview

PG20FR (PETG+20%GF) is a flame-retardant engineering plastic reinforced with 20% glass fiber. It combines excellent strength, heat resistance, and dimensional stability with superior flame protection, ensuring safety and reliability in demanding applications such as electrical housings, automotive components, and industrial parts.

Shenzhen Kings 3D Co., Ltd

Building B, No. 148 Huanli Road, Yungu Community, Xinhua Street,
Guangming District, Shenzhen, China.



Kings
3D Printing

■ Main Feature

- Excellent Flame Retardancy
- High Strength & Rigidity
- Good Heat Resistance
- Outstanding Dimensional Stability
- Balanced Toughness
- Excellent Processability

■ Physical Properties

Property	Test Method	Value
Density (g/cm ³ , 21-25°C)	ISO 1183-1:2019	1.565 g/cm ³
Vicat Softening Temperature(°C)	ISO 306:2022	89.8°C
Heat Deflection Temperature (°C)	ISO 75-2:2013	78°C
Melt Mass-Flow Rate (g/10min)	ISO 1133-1:2022	2.28g/10min

■ Mechanical Properties

Property	Test Method	Value
Rockwell Hardness(HRR)	ISO 2039-2:1987	112R
Tensile Strength(MPa)	ISO 527-2:2012	82.1MPa
Tensile Strain at Break(%)	ISO 527-2:2012	2.1%
Tensile Modulus(MPa)	ISO 527-2:2012	7740MPa
Flexural Strength(MPa)	ISO 178:2019	117MPa
Flexural Modulus(MPa)	ISO 178:2019	8250MPa
Izod Impact Strength(kJ/m ²)	ISO 180:2023	5.79 kJ/m ² (C, complete break)
Falling Dart Impact(J)	ASTM D5420-21	Average Breakthrough Energy < 0.25 J