High Performance Filaments

February 24th, 2021 Ver. 4

Perform **✓** FP

Technical Data Sheet

- ✓ Perform ✓ FP is a high performance Polypropylene filament with improved bed adhesion and controlled shrinkage, designed to work on FFF printers.
- ✓ Perform ✓ FP is virtually unbreakable, and has great functional properties just like injection molded or extruded PP parts.
- ✓ Perform ✓ FP can be printed as integral, living hinge, snap-fit and many other functional designs.

Typical Properties

Property	Test Method	Unit	Typ. Value
Nominal Diameter	-	mm	1.75 / 2.85
Density	ISO 1183	gr/cm3	0.90
Tensile Modulus	ISO 527	MPa	573
Tensile Strength	ISO 527	MPa	15
Flexural Strength	ISO 178	MPa	15
Impact Strength IZOD (Notched)	ASTM D256	j/m	153
Elongation	ISO 527	%	140%

^{*} The above are typical properties for a printed specimen

Recommended Settings

Parameter	Unit	Set Value
Nozzle Temp.	°C	220
Plate Temp.	°C	105
Initial Cooling		Off
Cooling	-	On, 100%
Print Speed	mm/sec	30-70
Retraction	mm	>6
Brim	mm	>25

Perform ✓ FP is prone to warping and separation from platform. Therefore, the use of adhesion sheets is strongly recommended. Using glue stick as an alternative adhesion method will be insufficient for reliable adhesion of large prints.

Disclaimer:

Typical properties and recommendations should be regarded as guideline values and not specifications. It is on the user responsibility to carefully evaluate the suitability of the material and its properties to the application