

# Technical data sheet – 3D Filament

## PEKK – (70/30)

**PEKK 70/30 – Poly Ether Ketone Ketone** is a copolymer with lower melting point  $T_m$  of 330°C but possessing a relatively high  $T_g$  of ~163 °C. The lower melting point allows for ease of processing at lower temperatures (350-370°C). **PEKK 70/30** is High performance thermoplastic unreinforced semi-crystalline polymer based on Polyether Ketone Ketone. It offers low out gassing properties, excellent heat resistance, wear resistance, chemical resistance & excellent mechanical performance, easy to print.

### FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	UNITS	Typical Values PEKK 70/30
Diameter	INS-6712	mm	1.75 ± 0.05
Specific gravity	ISO 1183	g/cm3	1.27
Moisture rate	INS-6711	%	< 1
MFI (@295°C – 5 kg)	ISO 1133	g/10min	30 to 40
Glass transition $T_g$	ISO 11357	°C	162
Melting temp $T_m$	ISO 11357	°C	332
	TEST METHOD	UNITS	PEKK 70/30
Tensile Strength	ISO 527	Mpa	100 to 110
Tensile Elongation	ISO 527	%	7
Tensile Modulus	ISO 527	GPa	3.5 to 4.0
Flexural Strength	ISO 178	MPa	150
Flexural Modulus	ISO 178	GPa	3 to 3.5
Heat Distortion Temp. 1.8 Mpa	ASTM D648	°C	172
Flammability Behaviour	UL	Rating	(V-0) @0.8 mm

PRINT RECOMMENDATION	PEKK 70/30 XY- Flat on bed
Nozzle Temp	360 to 380 °C
Print Speed	20-55 mm/sec
Bed Temp	130 °C
Nozzle	0.4 mm/
Infill	100 % +/- 45
Bed Adhesion	PEI

Disclaimer: The testing has been done in house so we extend no warranties what so ever, expressed or implied, including but not limited to, any implied fitness for any particular purpose. From the moment the product is shipped it is beyond our control. The information in this document is believed to be correct at the time of writing. However, handling, processing, settings, the type of 3D printer, slicing and other variables are completely up to the user. The method through which the product is used can be varied. It is up for the customer to determine how it is 3D printed and whether it is fit for purpose or suited to a particular application.



INNOVATIVE MARKETING ENTERPRISE

Email: [innovativemkt28@gmail.com](mailto:innovativemkt28@gmail.com)

Web: [www.innovativemkt.org](http://www.innovativemkt.org)

Mob: +91 9879386995