



# Technical Data Sheet

## InnoFlex 45 by Innofil3D BV

Filament suitable for all commercially available leading brands 3D FDM/FFF printers

### IDENTIFICATION OF THE MATERIAL

Trade name	InnoFlex 45
Chemical name	Thermoplastic Copolyester Elastomer.
Chemical family	Biobased Thermoplastic copolyester (TPC)
Use	3D-Printing
Origin	Innofil3D BV

### GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	230 ± 20 °C
Bed temperature	Up to 60 °C
Bed modification	Kapton tape
Active cooling fan	Yes (up to 100%)
Layer height	0.1 - 0.2 mm
Shell thickness	0.8 - 2.0 mm
Print speed	20 - 50 mm/s

Settings are based on a 0.4 mm nozzle

### MATERIAL PROPERTIES

MATERIAL PROPERTIES		Test Method
Melt temperature (T <sub>m</sub> )	180 °C	ASTM D3418
Glass transition temperature (T <sub>g</sub> )	-35 °C	ASTM D3418
Melt Flow Rate (MFR) <sup>1</sup>	Not determined	ISO 1133
Melt Volume Rate (MVR) <sup>1</sup>	Not determined	ISO 1133
Density (ρ)	1.15 g/cm <sup>3</sup>	ASTM D1505
Odor	Odorless.	/
Solubility	Insoluble.	/

<sup>1</sup>Test conditions: T=210°C; m=2.16kg



FILAMENT SPECIFICATIONS		Test Method
Diameter 1.75	1.75 ± 0.05 mm	Innofil3D
Diameter 2.85	2.85 ± 0.10 mm	Innofil3D
Max. roundness deviation 1.75	0.05 mm	Innofil3D
Max. roundness deviation 2.85	0.10 mm	Innofil3D
Net weight on reel	750 g ± 2%	Innofil3D