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## **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	Heated bed or tape.	
Active cooling fan	Yes (up to 100%).	
Layer height	0.1 – 0.2 mm	
Shellthickness	0.8 – 2.0 mm	
Print speed	20 - 50 mm/s	

Settings are based on a 0.4 mm nozzle

MATERIAL PROPERTIES		Test Method
Melt temperature (Tm)	180°C	ASTM D3418
Glass transition temperature (Tg)	-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>&</sup>lt;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	$2.85 \pm 0.10 \mathrm{mm}$	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