

# Technical Data Sheet Innoflex 45

Rev 130815

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

IDENTIFICATION OF THE MATERIAL	
Trade name	Innoflex 45 Arnitel Eco 40D
Chemical name	DSM Arnitel Eco
Chemical family	Biobased High Performance Thermoplastic Copolyester TPC
Use	3D-Printing
Company	Innofil3D BV

MATERIAL PROPERTIES		Test Method
Melting temperature (10°C/min)	180°C	ISO 11357-1/-3
Glass transition temperature Tg	-35°C	ISO 11357-1/-2
Density	1150 kg/m <sup>3</sup>	ISO 1183
Stress at break	24 MPa	ISO 527-1/-2
Elongation at Break	>300%	ISO 527-1/-2
Tensile modulus	95 MPa	ISO 527-1/-2
Shore D hardness	45	ISO 868
Food Contact	Natural grade is FDA approved Coloured grades not tested	
UV resistance	High	

MONOFILAMENT DATA		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
Color (RAL)	N.A.	Innofil3D
Print temperature guideline	230 ± 20°C	Innofil3D
Print speed guideline	Comparable or slower than PLA (PLA: 30 - 80 mm/s)	Innofil3D