

Technical Data Sheet

InnoCircle rPET by Innofil3D BV

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

IDENTIFICATION OF THE MATERIAL

Trade name	InnoCircle rPET Blue (recycled PET)
Chemical name	Polyethylene terephthalate
Chemical family	Thermoplastic copolymer
Use	3D-Printing
Origin	Innofil3D BV

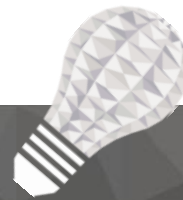
GUIDELINE FOR PRINT SETTINGS

Nozzle temperature	235 ± 10 °C
Bed temperature	75 ± 10 °C
Bed modification	Heated bed or tape.
Active cooling fan	Yes (up to 100%).
Layer height	0.1 - 0.2 mm
Shell thickness	0.08 - 2.0 mm
Print speed	40 - 80 mm/s

Settings are based on a 0.4 mm nozzle

MATERIAL PROPERTIES		Test Method
Melt temperature (Tm)	210 °C	ASTM D3418
Glass transition temperature (Tg)	Not determined.	ASTM D3418
Melt Flow Rate (MFR) ¹	Not determined.	ISO 1133
Melt Volume Rate (MVR) ¹	Not determined.	ISO 1133
Density (ρ)	Not determined.	ASTM D1505
Odor	Odorless.	/
Solubility	Insoluble in water.	/

¹Test 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

LIST OF COLORS AND CERTIFICATIONS*						
Colour	Code	RAL nr./ Pantone	Certifications/approvals			
			10/2011 ¹	FDA ²	2011/65 ³	EN 71-3 ⁴
Naturel Blue	0601	N/A	Yes	-	-	-

* This overview is generated using information obtained from the raw material suppliers.

Certifications/approvals	Description
¹ Regulation EU No 10/2011:	Union Guidelines on Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Europe)
² FDA:	Food and Drug administration approval (U.S.A.)
³ Directive 2011/65/EU:	The restriction of the use of certain hazardous substances in electrical and electronic equipment (Europe)
⁴ Directive 2009/48/EC; EN 71-3:	Safety of toys - Part 3: Migration of certain elements (Europe)