

# Technical Data Sheet



## Product name: ReForm™ - rPET

Version: v3

ReForm is a sustainable initiative within Formfutura to efficiently manage residual extrusion waste streams and re-use them into high-end upcycled filaments. The ideology behind ReForm is to make 3D printing more sustainable – without having to make compromises on material properties – and yet keep it affordable.

ReForm rPET is based on exactly the same unique formulation as our HDglass filament range, but is made out of residual extrusion waste streams which are re-compounded and homogenized into a high-end and easy to print upcycled PETG-based filament with significantly less environmental impact.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	1.27 g/cc	ASTM D792	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	0.13%	ASTM D570	-
<b>Mechanical</b>			
Impact strength	7.2 KJ/m <sup>2</sup>	ASTM D256	Izod Notched @23° C (73° F)
Tensile strength	50 Mpa	ASTM D638	@Yield 50mm/min (2 inch/min)
Tensile modulus	1940 Mpa	ISO 527	1mm/min
Elongation at break	120%	ASTM D638	50mm/min (2 inch/min)
Flexural strength	70.6 Mpa	ASTM D790	1.27mm/min (0.05 inch/min)
Flexural modulus	2147.6 Mpa	ASTM D790	1.27mm/min (0.05 inch/min)
Hardness	105	ASTM D785	Rockwell R-scale
<b>Thermal</b>			
Print temperature	± 195 - 225° C	-	-
Melting temperature	-	-	-
Viscat softening temp.	± 70° C	ASTM D648	@ 0.455 Mpa (66psi)
<b>Optical</b>			
Haze	<1.0%	ASTM D1003	-
Transmittance	90%	ASTM D1003	-
Gloss	-	-	-

Product details, certifications and compliance		Diameter	Tolerance	Roundness
HS Code	39169090	1.75mm	± 0.05mm	≥ 95%
REACH compliant	Yes	2.85mm	± 0.10mm	≥ 95%
RoHS certified	Yes			

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