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## **BIOPRO - TECHNICAL DATA SHEET**

3DTomorrow's BioPro is an engineering grade filament manufactured in the UK. BioPro has a biobased carbon content above 70% and is therefore intended as an eco friendly alternative to PETG/ABS filament. The range is aimed at users who have greater functional requirements than PLA/PLA+ provides; wish to support UK industry and also reduce their carbon footprint (vs alternative filament providers).

Unlike PETG/ABS, BioPro is designed specifically for 3D printing, so printed parts often greatly outperform these oil-based competitors. BioPro delivers significantly improved heat resistance over standard PLA, superior toughness and reduced susceptibility to UV degradation.

Eco footprint: every purchase of 3DTomorrow Filament supports over 10 UK businesses through our supply chain. A centralised supply chain reduces the carbon footprint of the product associated with the transport. In addition, our 100% recyclable cardboard spools and re-usable packaging help to encourage zero waste. Want to go further? Then make the most of our spool return & print waste return programs.

OVERVIEW		
Trade Name	3DTomorrow® BioPro <sup>TM</sup>	
Available Colours	Natural (Pale Grey) - More to come!	
Available Sizes	1.75mm	

FILAMENT SPECIFICATION			
Size	Ø Tolerance	Roundness	
1.75mm	$\pm 0.03$ mm (3 $\sigma$ )	≥ 95%	

MATERIAL PROPERTIES				
Description	Typical	Test Method		
Density	1.36g/cm <sup>3</sup>	ISO 1183		
Melt Flow Index	5g / 10 minutes	ISO 1133		
Melting Temperature	180°C	Observation - 3DTomorrow		
Vicat Softening Temperature A	112°C	ISO 306		
Print Temperature	220°C	Observation - 3DTomorrow		
Impact Strength	78 KJ/m <sup>2</sup>	ISO 179		
Tensile Strength	49 MPa	ISO 527		
Tensile Stress at Break	20 MPa	ISO 527		
Tensile Strain at Break	24%	ISO 527		
E Modulus	3,300 MPa	ISO 527		