

## **PLA Cosmic**

Recycled origin, unrivalled quality

## Description

PLA; the staple of desktop 3D printing. Short for polylactic acid, PLA is a bioplastic derived from plant-based sources, meaning it is more environmentally friendly compared to ABS, for example. However, PLA production is depleting natural resources faster than they can be replenished. To address this issue, we have pioneered rPLA 3D printer filament, still boasting the same great PLA features such as; low warping, limited smell and premium print quality – but with the added benefit of being produced from factory waste streams as opposed to virgin pellets. All users of rPLA can feel good about reducing the demand for natural resources and therefore saving the environment, whilst being confident that the print quality will still be one of the best on the market! The go-to filament for all 3D printer owners, perfect consumer products, toys and general prototypes.

		Test Method	Typical Value
Physical Properties	Specific Gravity	ISO 1183	1.24 g/cc
	Melt Flow Rate	ISO 1133	9.56 gr/10 min
	Moisture Absorption	ISO 62	1968 ppm

		Test Method	Typical Value
Mechanical Properties	Impact Strength	ISO 179	$3.4 \text{ kJ/m}^2$
	Yield Stress	ISO 527	69.8 MPa
	Strain at Yield	ISO 527	4.8%
	Strain at Break	ISO 527	19.5%
	E-Modulus	ISO 527	3120 MPa

		Test Method	Typical Value
Thermal Properties	Printing Temperature	=	190-220°C
	Melting Temperature	ISO 11357	77-146°C
	Viscat Softing	ISO 306	60°C
	Temperature		

Filament Specifications	Diameter	Tolerance	Roundness
	1.75mm	± 0.05mm	>95%
	2.85mm	± 0.05mm	>95%