

Technical Data Sheet



Product name: Premium PLA

Date of issue: 09 April 2015

Version: v2

Premium PLA is a high-end slightly modified and yet still as pure as possible PLA (Poly-Lactic Acid) type of 3D printer filament. Premium PLA has an excellent thermal stability and slightly faster crystallization process than modified PLA type of filaments. This makes Premium PLA more suitable for 3D printing slightly more complex structures which require an increased hardening process of the layered filament.

Premium PLA is nearly warp-free and therefore it will not deform after cooling. The Premium PLA colour palette is semi-transparent coloured, as the PLA filament is kept as pure as possible.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	1.24 g/cc	ASTM D1505	-
Melt flow rate	6.0 g/10min	-	-
Water absorption	-	-	-
Moisture absorption	-	-	-
Mechanical			
Impact strength	6.0KJ/m ²	-	-
Tensile strength	105 Mpa (MD)	ASTM D882	-
Tensile modulus	3145 Mpa (MD)	ASTM D882	-
Elongation at break	175% (MD)	ASTM D882	-
Flexural strength	± 54.4 Mpa	-	-
Flexural modulus	± 2364.3 Mpa	-	-
Hardness	-	-	-
Thermal			
Print temperature	± 205 - 225° C	-	-
Melting temperature	± 210 ± 10° C	-	-
Viscat softening temp.	± 62° C	ISO 306	-
Optical			
Haze	2.1%	ASTM D1003	-
Transmittance	-	-	-
Gloss	80	ASTM D1003	Gloss, 20°

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			
FDA Approved	Yes			

Formfutura VOF	CoC: 55502105	Tel: +31 (0)20 893 4114
Haparandaweg 67 E5	VAT: NL851741083B01	Email: info@formfutura.com
1013 BD Amsterdam	EORI: NL851741083	Website: www.formfutura.com
The Netherlands		

All information supplied by or on behalf of Formfutura in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but Formfutura assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the forementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.