



ePLA

Description

ePLA is our industrial high-performance PLA which features extreme performance on speed¹, mechanical properties² and high heat environments³. ePLA is perfect for printing speeds of > 120mm/s, allowing you to be more efficient in the same time. Users who use a lot of ABS now have a bio-based alternative material with all the advantages of ABS and none of the disadvantages like shrinking and delamination. Due to the composition of ePLA the material is already highly crystalline after printing, which increases the stiffness of the material at higher temperatures. When you combine this with annealing the ePLA the material reaches an HDT of 95°C+. Compared to other high temp. resistant PLA types ePLA has the USP of negligible small shrinkage after annealing (the dimensional accuracy is superb). ePLA has been specifically engineered for industrial applications where you want an easy to print filament with high mechanical properties. Objects that are printed with ePLA will have a semi matte finish which not only looks great but helps concealing layer lines.

		Test Method	Typical Value
<i>Physical Properties</i>	Specific Gravity	ISO 1183	1.27g/cc

		Test Method	Typical Value
<i>Mechanical Properties</i>	Impact Strength	ISO 179	23 kJ/m2
	Tensile Strength	ISO 527	40 MPa
	MFR 210°C/2,16 kg	ISO 1133	6 g/10 min*
	Elongation at break	ISO 527	47%
	Melting temp.		205±15°C
	Heat Deflection temp. (B) (after annealing)	ISO 75	95°C+**
	Tensile modulus	ISO 527	4000 MPa

		Test Method	Typical Value
<i>Thermal Properties</i>	Printing Temperature	Filamentive	230±10°C based on speed

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