

HPLA (HIGH PERFORMANCE PLA) FILAMENT

END USE

High-Performance PLA is a Polylactic Acid. PLA is a thermoplastic polymer that is derived from renewable resources like cornstarch or sugar cane. Plastics that are derived from biomass (e.g. PLA) are known as "bioplastics." PLA is a fully biodegradable thermoplastic polymer consisting of renewable raw materials.

PHYSICAL PROPERTIES

Product Code(s)	HPLA-MBLK-1000, HPLA-GREY-1000, HPLA-WHITE-1000
Colour(s)	Black, Grey, White
Density (g/cm ³)	1.25 (Test Standard - ASTM D792)
Melt Flow (170 °C, 2160g)	7 (Test Standard - ASTM D1238)
Melt Point (°C)	150-160 (Test Standard - DSC)
Vicat Softening Point A/120 (°C)	75 (Test Standard - ASTM D648)
Tensile Break(MPa)	45 (Test Standard - ASTM D638)
Break Elongation (%)	25 (Test Standard - ASTM D638)
Flexural Modulus (%)	8 (Test Standard - ASTM D790)
Impact Strength (Kj/m ²)	1.2 (Test Standard - ASTM D256)
Water Absorption (%)	<0.4 (Test Standard - ASTM D270)

PRINTER SETTINGS

Spool Net Weight: 1kg

Diameter: 1.75mm ± 0.05mm

Print Temperature: 190-220°C

Print Speed: 50-110mm/s

Bed Temperature: 0-50°C