TECHNICAL DATA SHEET
PLA HIGH-SPEED

1. DESCRIPTION

PLA High-Speed is a specifically designed filament for fast 3D printing. It enables more precise and detailed printing results at far higher speeds than standard PLA. Its superior flow characteristics and rapid cooling make it perfect for applications that require both efficiency and high quality, such as prototyping, design concept visualization, decorative objects, and functional parts. The material is easy to use, works reliably across various 3D printing environments, and delivers warp-free results for consistent and dependable prints – whether you're a beginner or an experienced user.

2. FEATURES

- High-speed printing up to 1000 mm/s
- Enhanced flow
- Quick cooling for complex shapes and overhangs
- High impact capability
- Consistent print quality
- Made from renewable raw materials
- Biodegradable (EN 13432)

3. PROPERTIES

TEST	METHOD	UNIT	VALUE
Density	Literature value	g/cm³	1.24
Melt flow index (MFI)	ISO 1133-A	g/10min	23
Melt flow index (MFI)	ISO 1133-A	g/10min	10
Stereochemical purity	Total Corbion PLA method	%	≤99
Residual monomer	Total Corbion PLA method	%	≤0.3
Water / moisture	Coulometric Karl-Fischer	ppm	≤400
Melting temperature	DSC	°C	175
Glass transition temperature	DSC	°C	60
Tensile modulus	ISO 527-1	MPa	3500
Tensile strength	ISO 527-1	MPa	50
Elongation at break	ISO 527-1	%	≤5
Charpy notched impact, 23°C	ISO 179-1eA	kJ/m2	≤5
HTB, amorphous[2]	ISO 75-1	°C	60
HTB, crystalline[2]	ISO 75-1	°C	105

*Temperature resistance tested at a minimum wall thickness of 4 mm.
[2] HDT B, 0.45MPa flatwise. HDT depends on processing conditions. For crystaline resins, formulation included 3-7% nucleating agent (Luminy* D070) and making took place in a 90-100°C tool.

PRINT SETTINGS	
Nozzle	up to 250°C
Heatbed	20-60°C
Adhesive	not required
Speed	up to 1000 mm/s
Cooling	30-100%
Enclosed Space	no
Hardened Nozzle	no
Max. Volumetric Speed	21 mm³/s

Recommended settings for printers with a 0.4mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.

4. CERTIFICATIONS & ADDITIONAL INFORMATION

FDA compliant · RoHS compliant · REACH compliant · FREE of Silicone · DEGRADABLE ISO 14885 · RECYCABLE

Certifications depend on colors in final product. More info in the additional information sheet.

5. STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight.
When stored correctly, this material has a shelf life of 2 years.
Additional info in our regulatory, additional information and chemical resistance data sheets.