



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	PRINT SETTINGS	
Density	ISO 1183	g/cm ³	1.24	Nozzle	up to 250°C
Melt flow index (MFI)	ISO 1133-A	g/10min	23	Heatbed	20-60°C
Melt flow index (MFI)	ISO 1133-A	g/10min	10	Adhesive	not required
Stereochemical purity	Total Corbion PLA method	%	≤99	Speed	up to 1000 mm/s
Residual monomer	Total Corbion PLA method	%	≤0.3	Cooling	30-100%
Water / moisture	Coulometric Karl-Fischer	ppm	≤400	Enclosed Space	no
Melting temperature	DSC	°C	175	Hardened Nozzle	no
Glass transition temperature	DSC	°C	60	Max. Volumetric Speed	21 mm ³ /s
Tensile modulus	ISO 527-1	MPa	3500	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.	
Tensile strength	ISO 527-1	MPa	50		
Elongation at break	ISO 527-1	%	≤5		
Charpy notched impact, 23°C	ISO 179-1eA	kJ/m ²	≤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.

²HDT B, 0.45MPa flatwise. HDT depends on processing conditions.

4. CERTIFICATIONS & ADDITIONAL INFORMATION



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.