High-Speed PLA Classic Series

QTS PLA-HS is a high-speed printing PLA filament made from premium raw materials sourced from NatureWorks, USA. It is well formulated and extruded entirely in Taiwan. The filament is biodegradable, and it heats up quickly, flows smoothly, and solidifies rapidly.

Product Features

- Heats and flows quickly: Ensuring efficient printing.
- No Clogging: Engineered to prevent nozzle from clogging during printing.
- Consistent Diameter Control: Ensures reliable performance with no jamming.
- Excellent Layer Adhesion: Enhances strong bonding between layers.
- Minimal Shrinkage: Reduces the possibility of printed parts detaching from the heated bed.
- Tangle-Free: Evenly wound filament eliminates tangles during use.

Applications

- Figurines and toys
- Home decor and daily items
- Product prototyping and development

Specifications

- Diameter: 1.75mm ±0.03mm
- Packaging: Vacuum-sealed
- Net Weight: 1kg per roll
- Each box contains one roll/ ten rolls per carton.

Usage Instructions

- Vacuum-Sealed Packaging: Do not open the packaging before use to prevent moisture absorption. Excessive moisture can severely affect 3D printing quality.
- Storage: After use, dry the filament promptly and store it in a vacuum bag to prevent moisture absorption.

Recommended Parameter Settings

Item	Data
Drying conditions	50°C * 8hr
Storage environment	< 40% RH
Nozzle size	0.2、0.4、0.6 mm
Nozzle temperature	190 ~ 230°C
Heated bed temperature	45 ~ 60°C
Cooling fan	On
Printing speed	150 ~ 600 mm/s
Recommended printing speed	300 mm/s
Maximum overhang angle	55 degree
Maximum bridging distance	20 mm

Mechanical Properties

Item	Data
Tensile Strength (X-Y)	41 Mpa
Tensile Modulus (X-Y)	1435 Mpa
Elongation at Break	5.20%
Bending Strength (X-Y)	72 Mpa
Flexural Modulus (X-Y)	2520 Mpa
Impact Strength (X-Y)	8.1 KJ/m2
Heat Distortion Temp (°C, 0.45MPa)	53°C
Melt Flow Index (g/10min @2.16kg，210°C)	36~40