

TECHNICAL DATA SHEET

3D FILAMENT PLA HS Date of issue: 01.12.2023 Date of update: 15.12.2023

PRODUCT NAME:	3D FILAMENT PLA HS (High Speed) 1,75mm
PRODUCT DESCRIPTION:	PLA HS (High Speed) filament – it's bio-polymer compound based on PLA poly(lactic acid), in the form of a thread. Designed for 3D printing using the FFF/FDM method. Special material formulation allow to get more higher print speed in comparison with standard filaments. Moreover material has increased impact and UV light resistance, and better biodegrability. Filament coiled on plastic spools, cardboard spool, or cardboard core (no spool), vacuum-packed with desiccant in a PA/PE bag, and then in a box.

STORAGE:

Store in dry area. Store in a closed container.

PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1,75
Diameter tolerance [mm]	+/- 0,03
Oval tolerance [mm]	+/- 0,02

Net weight [g]	1000	1000 (ReFill)	4500
Weight with packaging [g]	1400	1200	5500
Spool weight [g]	Masterspool ROSA3D: 250	Cardboard core: 30	850
Spool dimensions [mm] (ø / height / hole ø)	Masterspool ROSA3D: 201,7/65/52	Cardboard core: 99/57/94	300/100/52
Box dimensions [mm]	220/210/75	220/210/65	325/310/110



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RECOMMENDED PRINTING PARAMETERS

Parameter	Value	
Print temperature (Standard speed) [°C]	180-210	
Print temperature (High speed) [°C]	220-240	
Bed temperature [°C]	40-60	
Cooling [%]	50-100	
Closed chamber	Not necessary	
Drying conditions: [°C/h]	60/4	

PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1,23-1,24	g/cm ³	-
Tensile strength at break	54	MPa	ASTM D882
Elongation at break	4,5	%	ASTM D882
HDT A	55	°C	ASTM E2092

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of PLA HS parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use. ROSA PLAST Sp. z o.o. accepts no liability for any health detriment or material losses or any other losses related to the use of the material.

