

BASIC INFORMATION

PRODUCT NAME: FILAMENT 3D PLA LW Aero 1.75mm

PRODUCT DESCRIPTION: PLA LW Aero Filament is a blend of compostis based on poly(lactic acid) filament for FFF/FDM 3D printing. The supplied filament is wound on a cardboard core (no spool), vacuum sealed in a moisture absorbing bag and packaged in a cardboard box. The product is designed for use with 3D printers using FDM technology. It should be used in a well-ventilated room to avoid exposure to fume emissions during printing. It is important to avoid direct contact with hot printer components, which can lead to burns. Filament should be stored in a dry place, in a closed container and away from children. It is recommended to use the felt material within the recommended printing temperature range for optimum results. Dispose of waste filament in accordance with local regulations. The product has been designed with safety in mind and meets all relevant standards for consumer use.

STORAGE: Store in dry area. Store in a closed container.

PRODUCT PARAMETERS

PARAMETER	VALUE
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/-0,05
Oval tolerance [mm]	+/-0,02

RECOMMENDED PRINTING PARAMETERS

PARAMETER	VALUE
3D printing temperature [C]	220-250
Heated bed [C]	40-60
Cooling fan [%]	0-20
Closed chamber	no
Drying conditions [C/h]	50/4

PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
Gęstość / Density	1,18	g/cm3	-
Gęstość (220 st. C) / Density (220 deg C)	0,523	g/cm3	24/IT/OU/TT4
Gęstość (250 st. C) / Density (250 deg C)	0,457	g/cm3	24/IT/OU/TT4
Moduł sprężystości (220 st. C) / Tensile modulus (220 deg C)	940	MPa	PN-EN ISO 527-2:2012
Moduł sprężystości (250 st. C) / Tensile modulus (250 deg C)	620	MPa	PN-EN ISO 527-2:2012
Wytrzymałość na rozciąganie (220 st. C) / Tensile strength (220 deg C)	12,4	MPa	PN-EN ISO 527-2:2012
Wytrzymałość na rozciąganie (250 st. C) / Tensile strength (250 deg C)	8,81	MPa	Wydłużenie przy zerwaniu (220 st. C) / Elongation at break (220 deg C)
Wydłużenie przy zerwaniu (220 st. C) / Elongation at break (220 deg C)	18	%	PN-EN ISO 527-2:2012
Wydłużenie przy zerwaniu (250 st. C) / Elongation at break (250 deg C)	11	%	PN-EN ISO 527-2:2012
Udarność metodą Charpy'ego - karb (220 st. C) / Charpy impact strength - notched (220 deg C)	3.05	kJ/m2	PN-EN ISO 179-1:2023-11, 1eA
Udarność metodą Charpy'ego - karb (250 st. C) / Charpy impact strength - notched (250 deg C)	3,94	kJ/m2	PN-EN ISO 179-1:2023-11, 1eA
HDT A (220 st. C) / (220 deg C)	51	C	PN-EN ISO 75-2:2023-06, 1,8 MPa
HDT A (250 st. C) / (250 deg C)	54	C	PN-EN ISO 75-2:2023-06, 1,8 MPa
VICAT (220 st. C) / (220 deg C)	52,8	C	PN-EN ISO 306:2023-05, B50

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 LW Aero 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. Additional documents, certificates and detailed technical information can be provided on special request.

