

BASIC INFORMATION

PRODUCT NAME: FILAMENT 3D PET-G V0 FR 1.75mm

PRODUCT DESCRIPTION: PETG FR V0 HF filament - poly(ethylene terephthalate) with addition of glycol and flame retardant additives – free from halogen, and red phosphorus. Product in the form of a thread, designed for 3D printing using the FFF/FDM method. Filament coiled on spools, vacuum-packed with desiccant in a PA/PE bag, and then in a 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 filament 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]	230-260
Heated bed [C]	60-70
Cooling fan [%]	0-60
Closed chamber	not required
Drying conditions [C/h]	60/4

PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
Gęstość/Density	1.26	g/cm ³	ISO 1183
Moduł sprężystości/Elastic modulus	2350	MPa	ISO 527-1 (1 mm/min)
Wytrzymałość na rozciąganie/Tensile strength at yield	40	MPa	ISO 527-1 (5 mm/min)
Wydłużenie przy zerwaniu/Tensile elongation at yield	3.3	%	ISO 527-1 (5 mm/min)
Udarność metodą Charpy'ego/Charpy impact strength, unnotched	-	kJ/m ²	ISO 179-1eU
Udarność metodą Charpy'ego (z karbem)/Charpy impact strength, notched	3	kJ/m ²	ISO 179-1eA
VICAT	70	stC	ISO 306
HDT	63	stC	ISO 75; 0,45 MN/m ²
HDT	58	stC	ISO 75; 1,81 MN/m ²
Indeks tlenowy/Oxygen index	35	%	ASTM D 2863
Klasa palności/Flammability rate	V0	-	UL 94
Index palności rozżarzonym drutem/Glow wire flammability index	960stC @ 1 mm	-	IEC 60695-2-12
Index palności rozżarzonym drutem/Glow wire flammability index	960stC @ 2 mm	-	IEC 60695-2-12
Test zapłonu rozżarzonym drutem/Glow wire ignition test	775stC @ 1 mm	-	IEC 60695-2-13
Test zapłonu rozżarzonym drutem/Glow wire ignition test	775stC @ 2 mm	-	IEC 60695-2-13
Wskaźnik odporności na prądy pełzające (CTI)/ Comparative Tracking Index	600	V	IEC 60114

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 PET-G V0 FR 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.

