

BASIC INFORMATION

PRODUCT NAME: FILAMENT 3D R-PET-G Impact 1.75mm

PRODUCT DESCRIPTION: R-PET-G Impact filament is a recycled poly(ethylene terephthalate) with glycol in filament form, designed for 3D printing by FFF/FDM. The supplied filament is wound on a spool or on a cardboard coil (without spool), vacuum sealed in a bag with moisture absorber 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 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]	60-80
Cooling fan [%]	0-60
Closed chamber	not required
Drying conditions [C/h]	60/4-6

PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
Density	1,27-1,29	g/cm ³	-
Tensile Stress (Yield)	> 42	MPa	ISO 527
Odształcenie rozciągające przy granicy plastyczności	4	%	ISO 527
Tensile strength	> 42	MPa	ISO 527
Flexural strength	~74	MPa	ISO 178
Tensile Strain at Break	> 30	%	ISO 527
Flexural Stress	68	MPa	ISO 178
Elastic Modulus	2020	MPa	ISO 572
Charpy impact strength, unnotched	no break	kJ/m ²	ISO 179-1fU
Charpy impact strength (notched)	6.8	kJ/m ²	ISO 179-1eA
Izod impact strength (notched)	5.5	kJ/m ²	ISO 180
VICAT	79	°C	ISO 306
HDT A	63	°C	ISO 75, 1,8 MPa
HDT B	69	°C	ISO 75, 0,45MPa
Dielectric strength	~15	kV/mm	IEC 60243

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 R-PET-G Impact 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.

