

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

PRODUCT PARAMETERS

PARAMETER	VALUE
Filament diameter [mm]	1,75
Diameter tolerance [mm]	+/-0,05
Oval tolerance [mm]	+/-0,02
NET WEIGHT [g]	1000
Weight with packaging [g]	1200
Spool weight [g]	Cardboard core: 30
Spool dimensions [mm] (\varnothing / height / hole \varnothing)	Cardboard core: 99/57/94
Box dimensions [mm]	220/210/65

RECOMMENDED PRINTING PARAMETERS

PARAMETER	VALUE
Print temperature[°C]	230-260
Bed temperature [°C]	60-80
Cooling [%]	0-60*
Closed chamber	Not required
Drying conditions [°C/h]	60/4

*depending on fan capacity

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
Tensile Strain (Yield)	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.



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Date of issue: 18.04.2024r.

Date of update: version 1