

## BASIC INFORMATION

**PRODUCT NAME:** FILAMENT 3D HIPS High Impact, HT 1.75mm

**PRODUCT DESCRIPTION:** HIPS High Impact, HT filament — high-impact polystyrene in filament form, intended for 3D printing using FFF/FDM technology. The supplied filament is wound on a spool or supplied spoolless as a ReFill version, vacuum-sealed in a PA/PE bag with a moisture absorber, and packed in a cardboard box. The product is intended for use with 3D printers operating in FDM technology. It should be used in a well-ventilated room to avoid exposure to fume emissions during printing. Direct contact with hot printer components should be avoided, as this may cause burns. The filament should be stored in a dry place, in a sealed container, and kept away from children. It is recommended to use the filament within the recommended printing temperature range to achieve optimal results. Filament waste should be disposed of in accordance with local regulations. The product has been designed with safety in mind and complies with all applicable 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]	230-270
Heated bed [C]	80-100
Cooling fan [%]	20-60
Closed chamber	recommended
Closed chamber temperature [C]	50-80
Drying conditions [C/h]	70/4

## PHYSICAL PARAMETERS OF THE MATERIAL

PARAMETER	VALUE	UNIT	TEST METHOD
Gęstość/Density	1,04	g/cm <sup>3</sup>	ISO 1183
Moduł sprężystości/Tensile modulus	2000	MPa	ISO 527
Wydłużenie przy zerwaniu/Tensile strain at break	60	%	ISO 527
Napężenie rozciągające przy zerwaniu/Tensile stress at break	29	MPa	ISO 527
Napężenie rozciągające do granicy plastyczności/Tensile stress at yield	24	MPa	ISO 527
Wytrzymałość na zginanie/Flexural strength	43	MPa	ISO 178
Udarność wg metody Izoda (karb)/Izod impact strength (notched) (-30°C - 4mm)	6	kJ/m <sup>2</sup>	ISO 180/1A
Udarność wg metody Izoda (karb)/Izod impact strength (notched) (+23°C - 4mm)	8	kJ/m <sup>2</sup>	ISO 180/1A
VICAT B	92	°C	ISO 306
VICAT A	100	°C	ISO 306
Klasa palności/Flammability rate	HB	-	UL 94

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 HIPS High Impact, HT 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.

