

# TEHNICAL DATA SHEET

## UNIVERSAL HI (HIGH IMPACT)

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### Product description:

The UNIVERSAL HI filament is a high-quality acrylonitrile butadiene styrene (ABS), designed to offer excellent impact resistance, good flowability, and thermal stability. It is widely used in various industrial applications, rapid prototyping, especially for parts requiring durability and strength.

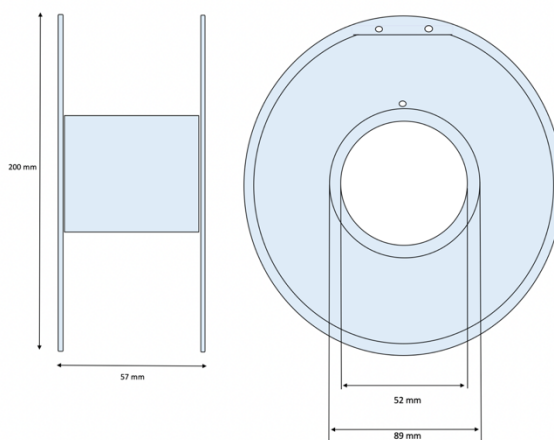
### Storage:

Store in dry area, in a closed container.

### PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/- 0,01
Oval tolerance [mm]	+/- 0,01

Spool dimensions [mm] (ø / height / hole ø )	200/57/52
Spool weight [g]	204
Spool material	Transparent SAN
Weight with packaging [g]	1 550
Net weight [g]	1 000
Box dimensions [mm]	203/207/70



### RECOMMENDED PRINTING PARAMETERS

Parameter	Value
Print temperature [°C]	230-260
Bed temperature [°C]	90-110
Cooling [%]	Turned off
Closed chamber	Necessary
Chamber temperature [°C]	50-80
Printing Speed [mm/s]	30-50

### PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1,03	g/cc	ISO 1183
Melt flow rate	12-18	g/10min	ISO 1133 220°C/10Kg
Vicat softening temp.	104	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	2030	MPa	ISO 527 1mm/min
Tensile strength	42	MPa	ISO 527 @Yield 50mm/min (2inch/min)
Elongation at break	10-20	%	ISO 527 @Break 50 mm/min (2inch/min)
Impact strength	22	KJ/m2	ISO 179 Charpy Notched @23°C (73°F)

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 UNIVERSAL HI 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.