

# TEHNICAL DATA SHEET

## HIPS (HIGH IMPACT POLYSTYRENE)

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### Product description:

HIPS (High Impact Polystyrene) is a thermoplastic filament widely used in 3D printing due to its impact resistance and rigidity. It is often utilized as a support material for other filaments like ABS, as it can be dissolved in limonene. HIPS is also used for finished parts requiring good impact resistance and a smooth surface.

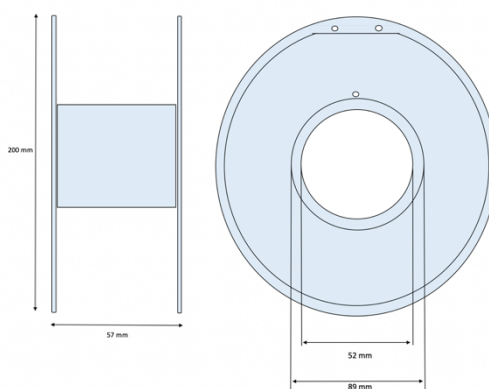
### Storage:

Store in dry area, in a closed container away from moisture.

### PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/- 0,002
Oval tolerance [mm]	+/- 0,001

Spool dimensions [mm] (ø / height / hole ø)	200/57/52
Spool weight [g]	325
Spool material	Transparent PC
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]	230-250
Bed temperature [°C]	90-110
Cooling [%]	Low or off
Closed chamber	Recommended to avoid warping
Chamber temperature [°C]	30-60
Printing Speed [mm/s]	30-70
Nozzle type	-

### PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1.05	g/cc	D792
Melt flow rate	5-9	g/10min	D1238
Vicat softening temp.	90-100	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	2 300	MPa	D882
Tensile strength	25-35	MPa	D882
Elongation at break	30-50	%	D882
Impact strength	14	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 HIPS 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.