

# HIPS

HIPS is an easy to print, High Impact Polystyrene filament with multifunctional properties. HIPS is an excellent support material in combination with ABS, because it dissolves in D'limonene and ABS remains unaffected. HIPS is very suitable for detailed prints, but also for large objects because the material shows very limited warping. Furthermore HIPS is very light and durable, has good interlayer bonding, can be glued easily and the colours result in a smooth matt surface of the 3D printed objects. High Impact Polystyrene is therefore widely used in model building.

## Material features:

- Dissolves in D'limonene
- High impact-resistance
- Can be glued easily
- For matt, detailed, complex or large prints
- Light and durable
- Virtually no "warping"

## Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%

## Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,04 g/cc
MFR 200°C/5 kg	ISO 1133	3,4 cm <sup>3</sup> /10 min
Tensile strength at break	ISO 527	22 Mpa
strain at break	ISO 527	50%
Tensile modulus	ISO 527	1550 Mpa
Impact strength - Charpy notched 23°C	ISO 179	15 kJ/m <sup>2</sup>
Printing temp.	DF	245±10°C
Melting temp.	ISO 11357	220±40°C
Vicat softening temp.	ASTM D1525	89°C

## Additional info:

Recommended temperature for heated bed is ± 65-110°C.

The speed with which HIPS dissolves in D'limonene is depending on the volume and improves by movement..

HIPS can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly