2015-02-11

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.

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"

Colours:
HIPS is available from stock in five matt colours.
For non stock colours a minimum order quantity of 40 kg ± 10% is required

Dimensions

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Physical properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,04 g/cc
MFR 200˚C/5kg	ISO 1133	3,4 cm/³10 min
Tensile stress	ISO 527	22 Mpa
Elong. at break (MD)	-	50%
Tensile modulus	ISO 527	1550 Mpa
Impact strength Izod method 23˚C	ISO 179	15 KJ/m²

Thermal properties

Description	Testmethod	Typical value
printing temp.	-	220-270˚C
melting temp.	ISO 294	220˚C ± 40˚C
vicat softening temp.	ASTM D1525	± 89˚C

Packaging:
HIPS is available in nearly any type of packaging and labelling. Ask our team to help you customizing your product.

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.