## 泟 HIPS

HIPS is an easy to print, High Impact Polystyrene filament with multifunctional properties. HIPS is an excellent support material in combination with $A B S$, 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"



## Colours:

HIPS is available from stock in five matt colours. Other colours on request


## Packaging:

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

| Filament specs. |  |  |
| :--- | :--- | :--- | :--- |
| Size | $\varnothing$ tolerance | Roundness |
| $1,75 \mathrm{~mm}$ | $\pm 0,05 \mathrm{~mm}$ | $\geq 95 \%$ |
| $2,85 \mathrm{~mm}$ | $\pm 0,10 \mathrm{~mm}$ | $\geq 95 \%$ |


| Material properties |  |  |
| :--- | :--- | :--- |
| Description | Testmethod | Typical value |
| Specific gravity | ISO 1183 | $1,04 \mathrm{~g} / \mathrm{cc}$ |
| MFR $200^{\circ} \mathrm{C} / 5 \mathrm{~kg}$ | ISO 1133 | $3,4 \mathrm{~cm}^{3} / 10 \mathrm{~min}$ |
| Tensile strength at break | ISO 527 | 22 Mpa |
| strain at break | ISO 527 | $50 \%$ |
| Tensile modulus | ISO 527 | 1550 Mpa |
| Impact strength - Charpy notched $23^{\circ} \mathrm{C}$ | ISO 179 | $15 \mathrm{~kJ} / \mathrm{m}^{2}$ |
| Printing temp. | DF | $245 \pm 10^{\circ} \mathrm{C}$ |
| Melting temp. | ISO 11357 | $220 \pm 40^{\circ} \mathrm{C}$ |
| Vicat softening temp. | ASTM D1525 | $89^{\circ} \mathrm{C}$ |

## Additional info:

Recommended temperature for heated bed is $\pm 65-110^{\circ} \mathrm{C}$.
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 $\left(15-25^{\circ} \mathrm{C}\right)$ and away from UV light. This enhances the shelf life significantly

