

Technical Data Sheet



Product name: EasyFil™ HIPS

Date of issue: 29 October 2015

Version: v2

EasyFil™ HIPS is a high-performance HIPS (High Impact PolyStyrene) type of 3D printer filament. Being slightly softer and more flexible than “normal” HIPS filaments - in combination with very limited warping, an excellent thermal stability and flowing behaviour - make EasyFil™ HIPS a truly “easy-to-print” 3D printer filament.

EasyFil™ HIPS is very chemically inert and has outstanding characteristics with respect to hygiene, strength and heat resistance and it prints really smoothly. EasyFil™ HIPS printed object will have a really beautiful matt coloured finish.

| Properties | Typical value | Test Method | Test condition |
|------------------------|----------------------------|-------------|-------------------------------|
| Physical | | | |
| Specific gravity | 1.04 g/cc | ISO 1183 | - |
| Melt flow rate | 3.4 cm ³ /10min | ISO 1133 | 220° C/5Kg |
| Water absorption | <0,1% | ISO 62 | Saturated at 23° C |
| Moisture absorption | <0.1% | ISO62 | Equilibrium 23° C/50% RH |
| Mechanical | | | |
| Impact strength | 15 KJ/m ² | ISO 179 | Charpy Notched @23° C (73° F) |
| Tensile strength | 22 Mpa | ISO 527 | Stress @ Yield 23° C |
| Tensile modulus | 1550 Mpa | ISO 527 | - |
| Elongation at break | 50% (MD) | - | - |
| Flexural strength | ± 51.2 Mpa | - | - |
| Flexural modulus | ± 2126 Mpa | - | - |
| Hardness | - | - | - |
| Thermal | | | |
| Print temperature | ± 220 - 260° C | - | - |
| Melting temperature | ± 180 - 260° C | ISO 294 | - |
| Viscat softening temp. | ± 89° C | ASTM D1525 | B/2 (120° C/h, 50N) |
| Optical | | | |
| Haze | - | - | - |
| Transmittance | - | - | - |
| Gloss | - | - | - |

| Product details, certifications and compliance | Diameter | Tolerance | Roundness |
|------------------------------------------------|----------|-----------|-----------|
| HS Code | 1.75mm | ± 0.05mm | ≥ 95% |
| REACH compliant | 2.85mm | ± 0.10mm | ≥ 95% |
| RoHS certified | | | |
| FDA compliant | | | |

| | | |
|------------------|---------------------|---------------------------------------------------------------------|
| Formfutura VOF | CoC: 55502105 | Tel: +31 (0)85 002 0881 |
| Groenestraat 215 | VAT: NL851741083B01 | Email: info@formfutura.com |
| 6531 HH Nijmegen | EORI: NL851741083 | Website: www.formfutura.com |
| The Netherlands | | |

All information supplied by or on behalf of Formfutura in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but Formfutura assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the forementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.