# Technical Data Sheet

**Product name:** **StoneFil™**

**Date of issue:** **17 March 2017**
**Version:** **v1**

StoneFil™ is a PLA based filament which is based on our modified and easy-to-print EasyFil™ PLA compound and is gravimetrically filled with 50% of powdered stone.

This high "stone filling" has resulted in a 3D printer filament with remarkable aesthetic features and a higher material density up to 37% higher than "normal" PLA. StoneFil™ is an easy-to-print filament and printed objects have an extremely matte stone-like finish with unique natural gradient linings resulting in a unique chromatic spectrum per print. Every StoneFil™ printed object will have its own identity and unique linings.

| Properties | Typical value | Test Method | Test condition |
|---|---|---|---|
| **Physical** | | | |
| Specific gravity | 1.7 g/cc | ISO 1183 | - |
| Melt flow rate | 94 g/10min | ISO 1133 | 210° C/2.16Kg |
| Water absorption | - | - | - |
| Moisture absorption | - | - | - |
| **Mechanical** | | | |
| Impact strength | 2.9 KJ/m² | ISO 179 | Charpy Notched @23° C (73° F) |
| Tensile strength | 38.0 Mpa | ISO 527 | @Yield 50mm/min (2 inch/min) |
| Tensile modulus | 4760 Mpa | ISO 527 | - |
| Elongation at break | 33% | ISO 527 | @ Break 50mm/min (2 inch/min) |
| Flexural strength | - | - | - |
| Flexural modulus | - | - | - |
| Hardness | - | - | - |
| **Thermal** | | | |
| Print temperature | ± 190 - 240° C | - | - |
| Melting termperature | ± 77 - 153° C | ISO 11357 | - |
| Viscat softening temp. | ± 57° C | ISO 306 | VST/A/50 (50° C/h, 10N) |
| **Optical** | | | |
| Haze | - | - | - |
| Transmittance | - | - | - |
| Gloss | - | - | - |

| Product details, certifications and compliance | |
|---|---|
| HS Code | 39169090 |
| REACH compliant | Yes |
| RoHS certified | Yes |
| FDA compliant | Yes |

| Diameter | Tolerance | Roundness |
|---|---|---|
| 1.75mm | ± 0.05mm | ≥ 95% |
| 2.85mm | ± 0.10mm | ≥ 95% |