

SafeGuard PLA

MATERIAL PROPERTIES

| | | |
|------------------------------|---------------------------|--------|
| Specific Gravity | 1.24 g/cm ³ | D 792 |
| MFR | 6 g/10min (210°C, 2.16kg) | D 1238 |
| Mechanical Properties | | |
| Tensile Strength at Break | 53 MPa | D 882 |
| Tensile Yield Strength | 60 MPa | D 882 |
| Tensile Modulus | 3.5 Gpa | D 882 |
| Tensile Elongation | 6,00% | D 882 |
| Notched Izod Impact | 16 J/m | D 256 |
| Heat Distortion Temperature | 55°C | E 2092 |
| Glass Transition Temperature | 55-60°C | D3418 |
| Flexural Strength | 83 MPa | D790 |
| Flexural Modulus | 3.8 MPa | D790 |

GUIDELINE FOR PRINT SETTINGS*

| | |
|-------------------------------------|--|
| Nozzle temperature - standard speed | 185-215°C |
| Bed temperature | 0-45°C |
| Active cooling fan | Up to 100% |
| Layer height** | 0.40 - 2.70mm |
| Shell thickness** | 0.05 - 0.30mm |
| Closed chamber | not necessary |
| Dry box | No |
| Ruby or hardened nozzle | No |
| Adhesive | not necessary (if you need increased adhesion or prevent warping: glue stick, Dimafix, 3DLac, Magigoo) |

* settings are based on a 0.4mm nozzle
 ** depending on the geometrical complexity

Disclaimer

The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. 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. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectrum Group Sp. z o.o. materials in any particular application.

DESCRIPTION

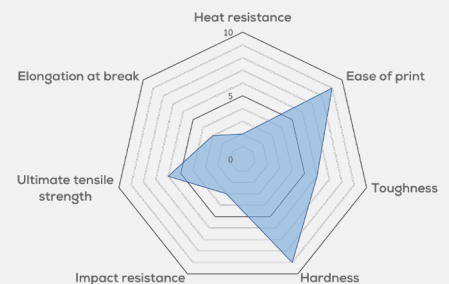
SafeGuard PLA is an advanced antibacterial 3D printing filament designed to protect surfaces from harmful microbes, viruses, biofilm, fouling and mold. ISO 22196 tests conducted on 3D-printed specimens show that SafeGuard PLA is over 99.9% more hygienic than standard PLA.

FEAUTURES

- Long-lasting effectiveness - retains its antibacterial properties over time
- Biocide-free - making it safe to use and preventing the migration of active substances from the material
- Versatile applications

STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at support@spectrumfilaments.com