

## GreenTEC Pro

### General

Compared to GreenTEC, GreenTEC Pro has an increased heat resistance and is therefore particularly suitable for high-temperature applications.

GreenTEC Pro is a bioplastic which has high tensile and flexural strength.

GreenTEC Pro is an ecological alternative to other technical plastics, consisting of 100% renewable raw materials and biodegradable according to DIN EN ISO 14855.

GreenTEC Pro Filament can be processed particularly easily on all commercially available 3D printers. Temperatures similar to those of PLA are required for processing.

The heat resistance is particularly high at 160 ° C (VST).

This filament meets the composition requirements of the European Regulation No. 10/2011 on plastic materials for food contact.



#### advantageous

- biodegradable
- from 100% renewable raw materials
- Odor free
- Little shrinkage
- Good tensile and flexural strength
- Higher temperature resistance than GreenTEC

#### disadvantageous

- Material price higher than GreenTEC

### Processing data

#### Printing temperature

190-250 °C

#### Heated bed temperature

50-90 °C

#### Drying temperature

80°C

#### Drying time

2h

### Technical specifications

|                                                    |      |                   |
|----------------------------------------------------|------|-------------------|
| Shrinkage (ISO 294-4, 2577)                        | 0.5  | %                 |
| MFR (ISO 1133)                                     | 12   | g/10min           |
| Yield stress (ISO 527)                             | 50   | MPa               |
| Elongation at yield (ISO 527)                      | 3    | %                 |
| Elongation at break (ISO 527)                      | 3.4  | %                 |
| Tensile modulus (ISO 527)                          | 4400 | MPa               |
| Heat deflection temperature<br>0.45 MPa (ISO 75-2) | 115  | °C                |
| Vicat softening temperature A<br>(ISO 306)         | 160  | °C                |
| Thermal conductivity 23°C                          | -    |                   |
| Flammability                                       | HB   |                   |
| Density                                            | 1.39 | g/cm <sup>3</sup> |