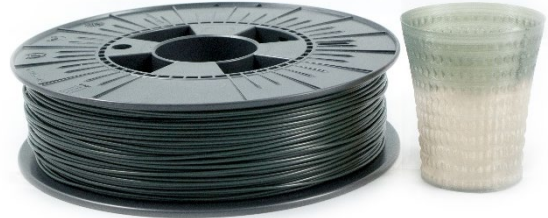


# TPLA

TPLA is a tough, easy to use high grade colour changing PLA type of filament. The dark grey colour will change to natural above 29°C, but much faster above 33°C or higher. Other features are according our slightly modified PLA product, so tougher and less brittle as a regular PLA. Due to a low shrinkage factor PLA will not deform after cooling. Poly Lactic Acid is a biodegradable plastic made from renewable natural resources and one of the most popular materials for 3D printing.

## Material features:

- Colour changing grey-natural > 33° Celsius
- Tougher and less brittle compared to regular PLA
- Easy to print at low temperature
- Low warping
- Biodegradable
- Limited smell



## Colours:

TPLA is available from stock in thermochrome dark grey.  
For other nonstock thermochrome colours please ask our team



## Packaging:

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

## Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

## Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,24 g/cc
MFR 210°C/2,16 kg	ISO 1133	9,56 gr/10 min
Yield Stress	ISO 527	70 Mpa
Strain at yield	ISO 527	5%
Strain at break	ISO 527	20%
E-Modulus	ISO 527	3120 Mpa
Impact strength - Charpy method 23°C	ISO 179	3,4 kJ/m2
Printing temp.	DF	205±10°C
Melting temp.	ISO 11357	115±35°C
Vicat softening temp.	ISO 306	60°C

## Additional info:

Due to its low tendency to warp TPLA can also be printed without a heated bed. If you have a heated bed the recommended temperature is ± 35-60°C.

TPLA can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.