

Premium PLA 3D Filament

Print in 3D and create prototypes, spare parts, quick and on-demand production, etc. in any shape or geometry. Gearlab 3D Filaments come in different plastic materials and with varying properties.

PLA polylactic acid is a biodegradable polymer derived from non-GMO corn starch. This means that an item made of PLA will slowly start to decompose when exposed to moisture, and if dropped in the sea it will dissolve completely after six months to two years. Compare this to conventional plastics where degradation will take 500-1,000 years.

Although PLA will degrade in an exposed natural environment, it is important to point out that it is very robust when printed and used in any normal application. With PLA it is easy to print big parts due to its thermal stability. It is stiff, hard, but also more brittle than some other compounds. This means that it may not be the best choice of material if the printed item will be exposed to repeated heavy bumps or sharp impacts.

Gearlab PLA 3D Filament is ideal for educational use as part of STE@M learning, as well as for corporate and private concept & rapid prototype modelling.



Gearlab PLA 3D Filament

Properties

Diameter	1.75 mm
Tolerance	0.05 mm
Weight	1 kg
Printing temperature	190-220°C
Printing speed	60-90 mm/s
Layer resolution	0.1-0.2 mm
Hot bed	Not required
Printing raft	Not required
Printing substrate	Not required
Tensile strength	≥ 60 Mpa
Impact strength	≥ 3 KJ/m
Elongation at break	3%
Distortion temperature	≥ 55°C

Features

- Very robust and hard
- Environmentally friendly, bio-degradable polymer
- Smoke- and odour-free printing
- Easy to print filament with stable printing size and low material shrinkage
- Enhanced post-print workability



IF YOU CAN DREAM IT, YOU CAN PRINT IT!