

# 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!

## 3D Filaments

PLA 3D Filament		PANTONE
GLB251000	PLA 1,75mm 1kg Black	Black
GLB251001	PLA 1,75mm 1kg White	White
GLB251002	PLA 1,75mm 1kg Grey	18-4214
GLB251003	PLA 1,75mm 1kg Silver	877C
GLB251004	PLA 1,75mm 1kg Orange	151C
GLB251005	PLA 1,75mm 1kg Dark yellow	123C
GLB251006	PLA 1,75mm 1kg Yellow	115C
GLB251007	PLA 1,75mm 1kg Green	363C
GLB251008	PLA 1,75mm 1kg Fluo green	802C
GLB251009	PLA 1,75mm 1kg Dark blue	072C
GLB251010	PLA 1,75mm 1kg Light blue	16-4725
GLB251011	PLA 1,75mm 1kg Rose magenta	37-1-7C
GLB251012	PLA 1,75mm 1kg Pink	230C
GLB251013	PLA 1,75mm 1kg Red	485C
GLB251014	PLA 1,75mm 1kg Purple	51-1-7C
GLB251015	PLA 1,75mm 1kg Brown	7587C
GLB251019	PLA 1,75mm 1kg Nature	Nature
GLB251064	PLA 1,75mm 1kg Transparent Orange	151C
GLB251069	PLA 1,75mm 1kg Transparent Blue	072C

Pearl PLA 3D Filament		PANTONE
GLB251020	PLA Pearl 1,75mm 1kg Black	Black
GLB251022	PLA Pearl 1,75mm 1kg Grey	18-4214
GLB251023	PLA Pearl 1,75mm 1kg Silver	877C
GLB251026	PLA Pearl 1,75mm 1kg Gold	871C
GLB251035	PLA Pearl 1,75mm 1kg Brown	7587

Flexible PLA 3D Filament		PANTONE
GLB255000	PLA Flex 1,75mm 1kg Black	Black
GLB255001	PLA Flex 1,75mm 1kg White	White
GLB225005	PLA Flex, 1,75mm 1kg Dark yellow	123C

Metal PLA 3D Filament	
GLB251050	Metal 1,75mm 1kg Aluminium
GLB251051	Metal 1,75mm 1kg Bronze
GLB251052	Metal 1,75mm 1kg Copper

PETG 3D Filament	
GLB252000	PETG 1,75mm 1kg Black
GLB252001	PETG 1,75mm 1kg White
GLB252002	PETG 1,75mm 1kg Grey
GLB252003	PETG 1,75mm 1kg Silver

PA Nylon 3D Filament	
GLB256001	PA Nylon 1,75mm 1kg White
GLB256019	PA Nylon 1,75mm 1kg Nature

PA Carbon Filled Nylon 3D Filament	
GLB256000	PA Carbon Nylon 1,75mm 0.5kg Black

ABS Pro 3D Filament	
GLB253000	ABS Pro 1,75mm 1kg Black
GLB253001	ABS Pro 1,75mm 1kg White

HIPS 3D Filament	
GLB253201	HIPS 1,75mm 1kg Black

PVA 3D Filament	
GLB254001	PVA 1,75mm 0,5kg White



Colours do not correspond the actual 3D filament colours.

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