

# ees 3D

# PRIMASELECT™ PLA

## Why should I use PrimaSELECT™ PLA?

- Up to 12 times tougher than regular PLA
- Very easy to print, even at low temperatures
- Very small risks for warping
- It's biodegradable
- No unpleasant smell



## PRIMASELECT™ PLA

PrimaSELECT™ PLA is a very nice 3D Print material, it's non-toxic and has a no unpleasant smell when you print with it. Because of its thermal characteristics it's easy to get great prints. Filament from PrimaFilaments comes on a transparent spool which makes it easy to see how much filament there are left on the spool.

Polylactic acid (PLA) is a bio-degradable polymer that is produced from lactic acid, which can be fermented from crops such as corn.

PrimaSELECT™ PLA has a slight shine to its appearance when the print is done. PrimaSELECT™ PLA also comes in a wide selection of beautiful and vivid colors with a nice appearance that are based on the RAL color system which in turn guarantees that you get the same color every time you order a new spool of filament.



\* Please see our website for latest options and colors available.

## COLORS AVAILABLE





# PRIMASELECT™ PLA



## INFORMATION:

With our new PrimaSELECT™ PLA we have succeeded in making a PLA that should suit most of your needs. PrimaSELECT™ PLA is a so called modified PLA and is about 12 times stronger than ordinary PLA, this is due to the impact modifier that has been mixed together with the best raw materials that has been carefully selected.

PrimaSELECT™ PLA feels a bit softer to the touch than regular PLA, it's also more pliable which makes it perfect for all printers including printers with a Bowden set up.

The results are not far from amazing and the material is extremely strong with very good interlayer adhesion. This also opens up a new world for the use of PLA. Until now PLA has been brittle and not very strong but with this new product you can use it for applications that before you needed ABS for. Due to the very low shrinkage and the fact that you don't need a heated bed PrimaSELECT™ PLA is very easy to use in all FDM/FFF printers. Warping is not a factor you have to consider if you use PrimaSELECT™ PLA and it will also not deform when your prints are done which is common among cheaper materials. The characteristics also makes the filament less prone to absorbing moisture which is a huge leap forward and gives you a great benefit when it comes to storage. If your printer is equipped with a heated bed we recommend that you use a temperature setting of 40-60°C.

If you have a dual hot-end set up and are going to print with support we recommend that you use PrimaSELECT™PVA that bonds well to our ABS and are easy to remove, PrimaSELECT™PVA is even soluble in water.

PrimaSELECT™ PLA sticks on BuildTak or glass plate coated with adhesive spray or glue stick.

PrimaSELECT™ PLA is reeled on a transparent spool with 750 g of high quality filament. It's packed in a sturdy box and packed with silica gel to avoid moisture.

PrimaSELECT™ PLA are available in diameter sizes of 1.75 mm and 2.85 mm.

## DIMENSIONS

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

## PHYSICAL PROPERTIES

Description:	Testmethod	Typical value
Specific gravity	ASTM D1505	1,24 g/cc
MFI	-	6,0 g/10 min
Tensile strength	ASTM D882	110 MPa (MD)n145 MPa (TD)
Elongation at break	ASTM D882	160% (MD)n100% (TD)
Tensile modulus	ASTM D882	3310 MPa (MD) n3860 MPa (TD)
Impact strength	-	7,5 KJ/m <sup>2</sup>

## THERMAL PROPERTIES

Description:	Testmethod	Typical value
Printing temp	-	190-220°C
Melting temp	-	210°C ± 10°C
Melting point	ASTM D3418	140-160°C
Vicat softening temp	ISO 306	±60°C

Our state of the art factory is equipped with the latest in laser measuring technology to ensure that you will receive a spool of filament with a very tight diameter and roundness tolerance.

This in turn makes for a filament that is compatible with most common printers on the market today.