

## Technical Data Sheet

### Ingeo™ PLA

#### General Information

3D Fuel™ Ingeo™ PLA (also known as 3D-Fuel™ Premium PLA) is a biodegradable thermoplastic made from corn. While the base resin utilized for the production of Ingeo PLA, the same manufacturing process are utilized to create a premium grade PLA filament with tight specifications for consistency, ovality, and roundness.

#### Printing Information

Printing with Ingeo PLA is will be an easy process thanks to its low processing temperature. A print temperature of 185 to 205 degrees Celsius is our recommended starting point. Ingeo PLA prints with little warping on a non-heated build surface with a raft. If your printer does have a heated bed, setting it to around 40 degrees Celsius may help with first layer adhesion when printing without a raft. Print speed should remain between \_\_\_ and \_\_\_ mm/s and should be varied based on part size. Print speed should remain between 50 and 100 mm/s and should be varied based on part size. Clean the nozzle after every use.

Ingeo™ PLA has moderately high interlayer adhesion which makes for a print that will stay together but still allow a raft to be easily removed if need be.

#### Storage

Like all of our filaments, Ingeo™ filament comes in a vacuum-sealed resealable bag with a pack of silica gel. In order to prevent the filament from absorbing moisture from the air, when the spool is not in use, place it back in the bag with a silica gel pack and seal it.

#### Values

Benefits of using Ingeo™ include simple, low odor printing with easy raft and support removal.

#### Resin Typical Material Properties

Property	Standard*	Ingeo™
Maximum Tensile Strength, MPa	ASTM D638	41
Tensile Strength at Yield, MPa	ASTM D638	37
Tensile Modulus, GPa	ASTM D638	3.2
Tensile Elongation, %	ASTM D638	1.8
Notched Impact, J/m	ASTM D256	26

\*All test specimen were 3D printed to more accurately represent expected usage