

Technical Data Sheet

Wound Up Coffee

Filament

General Information

3D-Fuel™ Wound Up - Coffee Filled filament is a composite made of biodegradable thermoplastic and waste from the coffee roasting process. It prints rigid parts with little to no warping or curling. It prints similarly to our Ingeo™ PLA but with an extremely unique surface finish and a pleasant coffee aroma while printing.

Printing Information

Printing with Wound Up filament will be similar to experiences printing with our Ingeo PLA. A print temperature of 190 to 220 degrees Celsius is our recommended starting point. Wound Up filament prints with virtually no warping on a non-heated build surface with a raft. If your printer does have a heated bed, setting it to around 50 degrees Celsius may help with first layer adhesion when printing without a raft. Print speed should remain between 50 and 120 mm/s and should be varied based on part size.

Wound Up filament can be printed with a raft. The default raft-part spacing on most slicers should be adequate for use with Wound Up, but if you notice that the raft becomes difficult to remove, the raft-model spacing can be increased slightly to allow for easier removal.

Storage

Like all of our filaments, Wound Up filament comes in a vacuum-sealed resealable bag. 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 and seal it.

Values

Benefits of using Wound Up filament include increased eco-friendliness, unique surface finish, coffee aroma while printing and the novelty of using a Coffee-filled material.

Resin Typical Material Properties

Property	Standard*	Wound Up	PLA**
Maximum Tensile Strength, MPa	ASTM D638	34	41
Tensile Strength at Yield, MPa	ASTM D638	16	37
Tensile Elongation, %	ASTM D638	4.1	1.8

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

** For comparison