

GRAFYLON™ 3D

A NEW GENERATION OF FILAMENTS FOR 3D PRINTING POWERED BY GRAPHENE PLUS

The collaboration between Filoalfa and Directa Plus, one of the largest producers and suppliers of graphene-based products in the world, has developed a new generation of PLA-based filaments for 3D printing powered by Graphene Plus.

Graphene Plus

Graphene Plus is a nanomaterial produced with a proprietary and patented technique G+, made up of Pristine Graphene Nanoplatelets (GNPs), multilayer of carbon atoms arranged in a honeycomb structure extremely pure and crystalline.

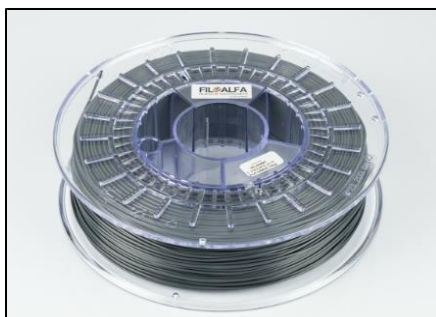
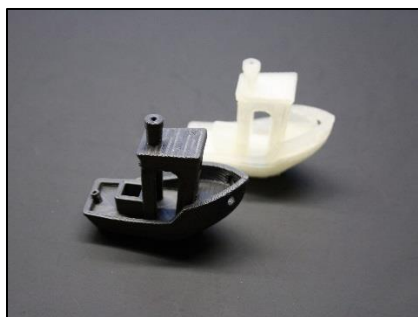
Unique, clean technology

Thanks to its technology based only on physical processes, Directa Plus is able to supply an eco-friendly product certified as safe for human health, that meets high standards in terms of performances.

Directa Plus is the first company in the world in its field to have conducted, and published the results of a series of toxicology screening tests to independently certify the non-toxicity of its process and products.

Greater performances* with GRAFYLON™ 3D filaments:

- ✓ **ELASTIC MODULUS: + 34%**
- ✓ **TENSILE STRENGTH: + 23%**
- ✓ **ELONGATION: + 28%**
- ✓ **IMPROVED SURFACE FINISH**



(*) The PLA filament has been printed into t-bone specimens, extrusion temperature 230°C and plate temperature of 40 °C, infill 100%. The specimens, with and without G+, have been tested according to ASTM D638.