

Part Number: 2503180001

Description: 3D Filament, PLA, 1.75mm, Blue, 750g

PLACTIVE AN1<sup>™</sup> is an innovative Nanocomposite developed with a high quality PLA and a patented, scientifically validated and highly effective Nano-Copper additive.

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- Antibacterial action has been scientifically validated eliminating more than 99.99% of fungi, viruses, bacteria and a wide range of microorganisms.
- Clinically tested in prosthesis for amputees with excellent results. Ideal for the manufacture of other medical applications where it's dangerous to have bacterial contamination, such as postoperative prostheses, wound dressing and surgical equipment.
- Antibacterial properties confirmed by two microbiology laboratories in Chile and USA.
- PLACTIVE™ is a FDA Registered Material and EU compliant (No. 10/2011, No. 1935/2004 and No. 2023/2006).
- The manufacturer also has certification ISO 9001/2015 and is REACH compliant.
- The Nano-Additive mantains all the mechanical properties of the material

- It has thermoforming characteristics that facilitates post-processing and final adjustments of the 3D printed application.
- Non-toxic product and environmentally friendly (biodegradable).

## Technical Specification:

PRINTING TEMP. 190 - 210°C
PRINTING SPEED 40 - 50MM/SEG
LAYER HEIGHT 0.1MM
PRINT BED TEMP. ± 0 - 60°C

Physical Properties	PLACTIVE TM	ASIM Method
Specific Gravity, g/cc	1.24	D792
MFR, g/10 min(2)	6	D1236
Relative Viscosity(3)	4	D5225
Clarity	Transparent	34
Peak Melt Temperature, *C	145-160	D3418
Glass Transition Temperature, "C	55-60	D3418
Mechanical Property		
Tensile Vield Strength, psi (MPa)	8700 (60)	D882
Tensile Strength at Break, psi (MPa)	7700 (53)	D882
Tensile Modulus, psi (MPa)	524,000 (3.6)	D882
Tensile Elongation, %	6	D882
Notched Izod Impact, ft-lb/in (J/m)	0.3 (16)	D256
Flexural Strength, psi (MPa)	12,000 (83)	D790
Flexural Modulus, psi (MPa)	555,000 (3.8)	D790
Heat Distortion Temperature, °C 66 psi (0.45 MPa)	55	E2092