

### PLA 3D870

SMARTIFL PLA 3D870 has been designed by Nature Works specially made for 3d printing. It offers improved thermal resistance and high strength to the impact on pieces printed with it, it has similar characteristics to the ABS keeping all the advantages of the PLA.



	TIPICAL VALUE			UNITS	TEST METHOD
<b>PHYSICAL PROPERTIES</b>					
Glass Transition Temperature	55-60			°C	ASTM D3418
Material Density	1.22			g/cm <sup>3</sup>	ASTM D792
<b>MECHANICAL PROPERTIES</b>					
	XY AXIS	YX AXIS	ZX AXIS		
Tensile Strength	40	32	24	MPa	ASTM D638
Tensile Modulus	2,865	2,447	2,447	MPa	ASTM D638
Flexural Strength	73	49	46	MPa	ASTM D790
Flexural Modulus	2,414	1,979	2,352	MPa	ASTM D790
Notched Izod Impact (amorphous)	160	21	109	J/m	ASTM D256
Notched Izod Impact (crystalline)	233	200	64	J/m	ASTM D256
Heat Deflection Temperature	40	40	40	MPa	ASTM E2092
<b>PRINTING PROPERTIES</b>					
Print Temperature	190-230			°C	
Hot Pad	0-60			°C	
Annealing Temperature	110-120			°C	
<b>SIZE</b>	<b>NET W.</b>	<b>GROSS W.</b>	<b>DIAMETERS</b>	<b>COLOR</b>	<b>PACKAGING</b>
M	750 g	975 g	1.75 mm/2.85 mm	Various colors	SmartBag, security seal, desiccant bag

DISCLAIMER: The information provided in the data sheets is intended to be just a reference. It should not be used as design or quality control values. Actual values may differ significantly depending on the printing conditions. The final performance of the printed components does not only depend on the materials, also the design and printing conditions are important.

Smart Materials assumes no responsibility for any damage, injury or loss produced by the use of its filaments in any particular application.