PLA 3D870

TECHNICAL DATA SHEET VERSION 1.1

SMARTFIL by smart materials 3D

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.

Reciclable
Recyclable
Recyclable

	TIPICAL VALUE			UNITS	TEST METHOD
PHYSICAL PROPERTIES					
Glass Transition Temperature	55-60			°C	ASTM D3418
Material Density	1.22			g/cm^3	ASTM D792
MECHANICAL PROPERTIES	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
PRINTING PROPERTIES					
Print Temperature	190-230			°C	
Hot Pad	0-60			°C	
Annealing Temperature	110-120			°C	

SIZE	NET W.	GROSS W.	DIAMETERS	COLOR	PACKAGING
M	750 g	975 g	1.75 mm/2.85 mm	Various colors	SmartBag, security seal, desiccant bag