

TECHNICAL DATA SHEET

PA12+CF15

3D Filaments – PRINT WITH SMILE



Data were obtained by a few lots of material and are subjected to variations. Specimens are printed under the following conditions:
angle 45°, infill 100%.

PHYSICAL PROPERTIES - Typical values	STANDARDS	SI UNITS	
Density			
sample	ISO 1183	1.05	g/cm ³
MECHANICAL PROPERTIES - Typical values			
CHARPY impact strength (sample 80x10x4 mm)			
Unnotched, as printed	ISO 179-1eU	55	kJ/m ²
Notched, as printed	ISO 179-1eA	14	kJ/m ²
Tensile elongation (speed 5 mm/min)			
At break, as printed	ISO 527 (1)	7	%
Tensile strength (speed 5 mm/min)			
At break, as printed	ISO 527 (1)	50	MPa
Elastic modulus			
Tensile (speed 1 mm/min), as printed	ISO 527 (1)	3650	MPa
THERMAL PROPERTIES - Typical values			
VICAT - Softening point			
50 N (heating rate 50°C/h), as printed	ISO 306	168	°C
0.45 MN/m ² , as printed	ISO 75	92	°C
1.81 MN/m ² , as printed	ISO 75	85	°C
PROCESSING PARAMETERS			
Nozzle temperature		250	°C
Plate temperature		90	°C
Object resolution		0.15	mm
Shell thickness		0.6	mm
Print speed		40	mm/s

The material has not to be considered suitable for specific applications in medical sector.
The material has not to be considered suitable for potable water and/or food contact.

