

## ABS MEDICAL

Filament of excellent quality specially designed for the field of medicine. Its UPS Class VI or ISO 10993-1 certifications ensure the biocompatibility of the material with the human body.

In terms of technical characteristics, they are very similar to normal ABS.



Thermal resistance



Food Approved



Biocompatible

	VALUES		UNIT OF MEASUREMENT	STANDARD	
<b>PHYSICAL PROPERTIES</b>					
Chemical name	Acrylonitrile Butadiene Styrene				
Density	1,05		g/cm <sup>3</sup>	ISO 1183	
<b>MECHANICAL PROPERTIES<sup>1</sup></b>					
	XY PLANE	ZX PLANE			
Tensile strength	34,5	15,4	MPa	ISO 527	
Traction module	-	-	MPa	ISO 527	
Flexion strength	72,9	20,8	MPa	ISO 178	
Flexion module	2376,5	161	MPa	ISO 178	
Elongation at maximum effort	1,3	0,7	%	ISO 527	
Stretch traction at break	2,9	0,7	%	ISO 527	
Elongation by flexion at break	7,4	1,9	%	ISO 178	
Charpy Impact Force (non-notched)	29,3	2,5	kJ/m <sup>2</sup>	ISO 179	
Hardness	-	-	Shore D	ISO 7619-1	
<b>THERMAL PROPERTIES</b>					
Glass transition temperature (Tg)	105		°C	ISO 11357	
VICAT B (50 N 50°C/h)	98		°C	ISO 306	
HDT B (0,45 MPa)	98		°C	ISO 75	
<b>PRINTING PROPERTIES</b>					
Printing temperature	235 - 255		°C		
Bed temperature	100 - 110		°C		
Layer fan	0 - 20		%		
Material flow	100		%		
Layer height	≥ 0,2		mm		
Nozzle recommendations	≥ 0,4		mm		
Print speed	30 - 50		mm/s		
<b>SIZE</b>					
SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETER	COLOR	PACKAGING
M	750 g	975 g	1,75 mm/2,85 mm	Natural	Innovatefil box

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