## TECHNICAL DATA SHEET

**VERSION 1.2 REVISION: 02/22/2023** 



## PC

Innovatefil Polycarbonate is an advanced filament with great impact resistance. It has high resistance to thermal deformation and very good dimensional stability. This material has been designed to be used in 3D printing, so shrinkage is minimal during use.

Some of its advantages are:

- Fairly high impact resistance.
- · High strength and rigidity.
- · High resistance to thermal deformation.
- · Good chemical insulation properties.









Thermal resistance

Impact resistance

High industrial capacity

		VALUES		UNIT OF MEASUREM	ENT STANDARD
PHYSICAL	PROPERTIES				
Chemical Name		Polycarbonate			
Density		-		g/cm3	ISO 1183
MECHANIC	CAL PROPERTIES <sup>1</sup>	XY PLANE	XZ PLANE		
Tensile str	rength	-	-	MPa	ISO 527
Traction N	Лodule	-	-	MPa	ISO 527
Flexural strength		-	-	MPa	ISO 178
Flexural modulus		-	-	MPa	ISO 178
Elongation at maximum effort		-	-	%	ISO 527
Tensile elongation at break		-	-	%	ISO 527
Flexural elongation at break		-	-	%	ISO 178
Charpy Impact Force (without notch)		-	-	kJ/m2	ISO 179
Hardness		-		Shore D	ISO 7619-1
THERMAL I	PROPERTIES				
Glass Transition Temperature (Tg)		146		°C	ISO 11357
VICAT B (50 N 50°C/h)		145		°C	ISO 306
HDT B (0.45 MPa)		-		°C	ISO 75
PRINT PRO	PERTIES				
Printing Temperature		270 - 290		°C	
Bed Temperature		110+		°C	
Print speed		30 - 50		mm/s	
Layer Fan		40 - 60		%	
Material Flow		100		%	
Layer Height		≥ 0,2		mm	
Nozzle Recommendations		≥ 0,4		mm	
SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETERS	COLOR	PACKAGING
М	750 g	900 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 depends not only on the materials, but also on the design and printing conditions.