PETG PELLET

TECHNICAL DATA SHEET VERSION 1.0

smart materials 3D

PETG

PETG polymer is a low shrinkage material, which makes it easy to print. Ideal for large pieces. PETG stands out for its chemical resistance and is compatible for food use.
You can get translucent pieces since it has a 91% transparency in its natural state, very similar to glass and very resistant, with great thermal resistance.

It has a medical BIOCOMPATIBILITY certificate USP Class VI and ISO 10993-1



	VALUES	UNIT OF MEASURE	STANDARD
PHYSICAL PROPERTIES			
Chemical name	Polyethylene Terephthalate		
Material density	1,27	g/cm^3	ISO 1183
Glass transition temperature	80	˚C	DSC
MECHANICAL PROPERTIES			
Tensile strength at break (23˚C)	30	MPa	ISO 527 – 1
Tensile module	1920	MPa	ISO 527 – 1
Elongation at break	≤ 240	%	ISO 527 – 1
Flexion strength	67	MPa	ISO 178
Flexion module	1920	MPa	ISO 178
Izod impact (with notched at 23˚C)	8,8	kJ/m^2	ISO 180
THERMAL PROPERTIES			
Heat deflection temperature (HDT-B)	73	˚C	ISO 75 – 1

PROCESING RECOMMENDATIONS [1]

Pre-drying	6 hours at 65˚C
Feed zone	70 – 80˚C
Melt zone	220 – 230˚C
Mixing zone	220 – 230˚C
Nozzle o die head	195 – 205˚C

1 (typical values, depending on the equipment require to be optimized)

SIZE	NET WEIGHT	GROSS WEIGHT	COLOR	PACKAGING
S	1 kg	1,1 kg	Transparent	SmartBag, security seal.
M	5 kg	5,2 kg	Transparent	Polyamide Bag, Small cardboard box.
L	15 kg	15,5 kg	Transparent	Polyamide Bag, Small cardboard 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.