

TECHNICAL DATA SHEET VERSION 1.0

PP

Polypropylene with special additives to improve its adhesion to the printing surface. Very versatile material, transparent, light and flexible. It also has excellent mechanical and chemical resistance making it ideal for industrial applications.



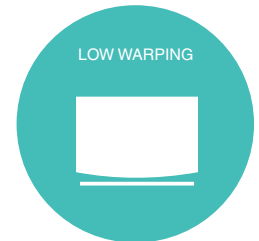
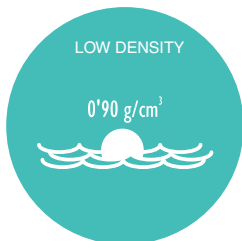
Reciclable  
Recyclable  
Recyclable



Apto para contacto  
con alimentos  
Food Approved  
Aliments approuvés

	TYPICAL VALUE	UNITS	TEST METHOD
<b>PHYSICAL PROPERTIES</b>			
Chemical Name	Polypropylene		
Material Density	0.9	g/cm <sup>3</sup>	ISO 1183
<b>MECHANICAL PROPERTIES</b>			
Tensile strength (at break, 23 °)	20	MPa	ISO 527 -1,-2
Flexural modulus (23 °)	620	MPa	ISO 178
Shore D hardness	58		ISO 868
<b>THERMAL PROPERTIES</b>			
Thermal deflection temperature	62	°C	ISO 75
Softening temperature Vicat B50	107	°C	ISO 306
<b>PRINTING PROPERTIES</b>			
Print Temperature	200-220	°C	
Hot Pad	40-60	°C	
Fan Layer	OFF	%	

SIZE	NET W.	GROSS W.	DIAMETERS	COLOR	PACKAGING
M	700 g	975 g	1.75 mm/2.85 mm	Varios colores	SmartBag, security seal, desiccant bag



# USE RECOMENDATIONS

## PRINTING TEMPERATURE

It is recommended to **use a printing temperature between 205-220°C of 205-220°C**. Above this temperature, it will come very fluid and this will decrease the printed piece quality. On the other hand, below this temperature the material will become difficult to be extruded by the printer.

## HOT BED

**The heating bed should be between 45/60°C.**

## TIPS FOR BETTER ADHESION TO THE PRINTING

Smartfil PP has special additives to reduce contractions during the printing process. Still, depending on the size of the working piece we suggest the following recommendations to get the best adhesion of the material to the printing bed.

-Using specific adhesives: For example, SMART STICK, that can be used to fix the PP to the printing bed. This adhesive acts as an interface between the material and the base, achieving great adhesion.

-Use of adhesive tape: You can also use PP adhesive tape. The filament will stick well on the tape as PP goes well with PP. The best way to do it is to cut small pieces of tape to cover the part of the base where the printed piece will go. Thanks to the adhesive of the tape it will remain adhered to the base without any problem and we will be able to print our piece with no cracking on contractions.

-Use of additional edges (Brim): In the cases where it is necessary, it is convenient to use the option (Edge or Brim) in the laminating program. This will increase the contact surface so that a greater adhesion with the base will be achieved.

AVISO: la información proporcionada en las hojas de datos está destinada a ser solo una referencia. No debe utilizarse como valores de diseño o control de calidad. Los valores reales pueden diferir significativamente dependiendo de las condiciones de impresión. El rendimiento final de los componentes impresos no solo depende de los materiales, también son importantes las condiciones de diseño e impresión.