

PETG MDT MAGNETO DETECTABLE

Smartfil PETG MDT (magnetically detectable thermoplastic) is a filament for 3D printing designed to be detected by any type of auto switch, even when the material is present in very small particles.

This property makes it especially suitable for the food industry, where the absence of contaminants of any origin is essential. It is also recommended for the manufacturing of sensors, smart packagings, etc. In addition, this filament possess a high dimensional stability. It can be in contact with food and resistant to moisture, fungi and mold.

It is very easy to print, as it has very low shrinkage and requires no warm bed.



Apto para contacto
con alimentos
Food Approved
Aliments approuvés

	TIPICAL VALUE	UNITS	TEST METHOD		
PHYSICAL PROPERTIES					
Chemical Name	Polyethylene Terephthalate compound				
Material Density	1.57	g/cm ³	ISO 1183		
MECHANICAL PROPERTIES					
Tensile Stress at break	35	MPa	ISO 527		
Tensile elongation at break	3.6	%	ISO 527		
Tensile Modulus	2450	MPa	ISO 527		
Charpy Impact Strength (notched, 23°)	2.9	kJ/m ²	ISO 179/1eU		
THERMAL PROPERTIES					
Heat Distorsion Temperature (HDT-A)	64	°C	ISO 75		
Heat Distorsion Temperature (HDT-B)	70	°C	ISO 75		
Vicat Softening Temperature B50	72	°C	ISO 306		
PRINTING PROPERTIES					
Print Temperature	220-240	°C			
Hot Pad	70-90	°C			
Fan Layer	ON	%			
Print Speed	40-60	mm/s			
SIZE	NET W.	GROSS W.	DIAMETERS	COLOR	PACKAGING
M	750 g	975 g	1.75 mm/2.85 mm	Natural	SmartBag, security seal, desiccant bag

USE RECOMENDATIONS

RECOMMENDED NOZZLE DIAMETER

It is necessary to use a 0.6 mm diameter nozzle and a layer height equal to or greater than 0.2 mm for the manufacture of parts, with this we avoid that the load incorporated to the material can block the extruder.

CLEANING THE EXTRUDER AFTER USE

The use of SMART CLEAN is recommended once the material is used to prevent it from staining subsequent prints.



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

Smart Materials assumes no responsibility for any damage, injury or loss produced by the use of its filaments in any particular application.