

ABS MDT MAGNETO DETECTABLE

Smartfil ABS 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.

It is also recommended for the manufacturing of sensors, smart packagings, etc. In addition, this filament possesses a high dimensional stability.

Material very tenacious, hard and rigid, with chemical resistance to abrasion.



		TIPICAL VALUE	UNITS	TEST METHOD	
PHYSICAL PROPERTIES					
Chemical Name		ABS compound			
Material Density		1.29	g/cm³	ISO 1183	
MECHANICAL PROPERTIES					
Tensile Stress at break		20	MPa	ISO 527	
Tensile elongation at break		8.5	%	ISO 527	
Tensile Modulus		1800	MPa	ISO 527	
Charpy Impact Strength (notched, 23°)		8.5	kJ/m²	ISO 179/1eU	
THERMAL PROPERTIES					
Heat Deflection Temperature (HDT-A)		75	°C	ISO 75	
Heat Deflection Temperature (HDT-B)		90	°C	ISO 75	
Vicat Softening Temperature B50		80	°C	UL746B	
ELECTRICAL PROPERTIES					
Surface resistance max.*		1 ¹²	Ohm	ASTM D 257	
* Values obtained under tests on specimens obtained by injection					
PRINTING PROPERTIES					
Print Temperature		260-280	°C		
Hot Pad		80-100	°C		
Fan Layer		OFF	%		
Print Speed		30-50	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

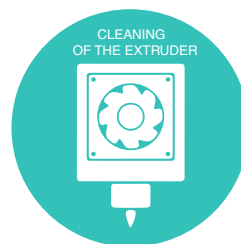
USE RECOMENDATIONS

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.