

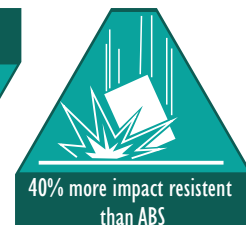
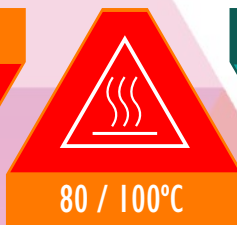
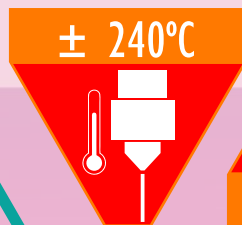


smart materials **3D**

## **SMARTFIL<sup>®</sup> ABS H.I.: THE SMART 3D ABS FILAMENT** **BY SMART MATERIALS 3D**

As its name implies, the ABS High Impact is even more resistant against impact than common ABS. This material is thought out for industrial applications to print high mechanical performance pieces.

### **¿Which are its main properties?**



#### **¿Do you know...**

ABS is soluble in acetone? This can be really interesting if you want your pieces to have excellent and bright surface finishes. If so, try doing what is called an acetone vapor bath, always with extremely care because acetone is a toxic chemical.

Here we share with you a video where it is showed how to do easily this process and the final results obtained:

[www.youtube.com/watch?v=Jv-Cbn88Uz4](https://www.youtube.com/watch?v=Jv-Cbn88Uz4)

### **¿What can you achieve with this material?**

- ▼ **Pieces with greater impact resistance** than those made with ordinary ABS
- ▼ Out ABS low warping let you print with this material much easier.

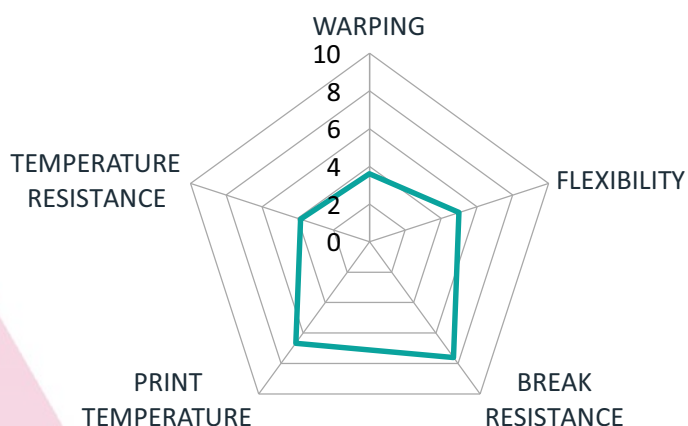
## SMARTFIL® ABS H.I.

This ABS has high impact resistance, specially design for the industrial field. We recommend it to print pieces that required high mechanical performance.

WARPING	LOW
FLEXIBILITY	MED
BREAK RESISTANCE (IZOD)	VERY HIGH
PRINT TEMPERATURE	±240°C
TEMPERATURE RESISTANCE	97°C
HEATED BED	80-100°C
DENSITY	1,04 g/cm³



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CHARACTERISTIC	SMARTFIL ABS H.I.	UNIT	TEST METHOD
BREAKING RESISTANCE (IZOD)	37	KJ/m²	ASTM (D256)
TENSILE STRENGTH	420	Kg/cm²	ASTM (D638)
SURFACE HARDNESS (ROCKWELL)	98	Mpa	ISO 2039-1
THERMAL RESISTANCE	97	°C	ISO 306
DENSITY	1,04	g/cm³	ISO 1183
BENDING STRENGTH	580	Kg/cm²	ISO 178

### DIAMETERS

- ✓ 1.75mm (± 0.03)
- ✓ 2.85mm (± 0.05)

**\*Note:** None of our products is produced with recycled material in order to get the highest quality filaments.

### COLOURS

COLOUR	NAME
NATURAL	NATURAL

### PACKAGING

SIZE	NET WEIGHT	GROSS WEIGHT	PACKAGING CHARACTERISTICS
M	750g	975g	SMART bag, desiccant bag, guarantee seal