

## HIPS · Technical Data Sheet

### General Features

<b>Chemical Name</b> High Impact Polystyrene	<b>Benefits</b> <ul style="list-style-type: none"><li>• High-resolution smooth surfaces</li><li>• Great interlayer adhesion</li><li>• Resistance to shattering</li></ul>	<b>Main Applications</b> Dissolvable support material for ABS, mate finishing parts, d lemonelo soluble supports, aircraft models.
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### Filament Characteristics

<b>Diameter</b>	Ø 1.75mm	Ø 2.85mm
<b>Meters per spool</b>	294.163m	110.911m
<b>Weight per meter</b>	2.55g	6.76g
<b>Tolerance</b>	±0.02mm	±0.03mm

### Material Properties

		Typical value	ASTM Method
<b>Tensile Strength at Yield, psi</b>	MPa	2.500 (17)	D 638
<b>Tensile Strength, psi</b>	MPa	195.000 (1350)	D 638
<b>Tensile Elongation</b>	%	3.31	D 638
<b>Izod Impact Strength Notched, ft-lb/in</b>	J/m	1.7 (95)	D 256
<b>Elongation</b>	%	>50%	-
<b>Flow Index</b>	mfr	80-90	E 2092
<b>Heat Distortion</b>	°C	89	D 648
<b>Density</b>	g/cm <sup>3</sup>	1.06	D 792
<b>Vicat Softening Temperature</b>	°C	90	D 1525
<b>Water Absorption</b>	%	0.03/0.07	D 570

### Recommended printer settings

<b>Print temperature</b>	235±5°C
<b>Print bed temperature</b>	95° First/100° Later
<b>Cooling fans</b>	Off
<b>Closed environment</b>	Required
<b>Adhesive</b>	Required

### Available Colours

Colour	Pantone Code
Black	6C
Blue	2935 C
Red	485 C
White	11-4001

#### Disclaimer:

This TDS, based on current knowledge and experience, contains a general summary of hazards and is consistent with the information provided by the supplier. No liability can be assumed for the accuracy and completeness of this information. The information in this TDS applies for this specific material only. It therefore does not apply for its usage in combination with other materials or ways of processing. It is user's responsibility to read and understand this information and incorporate it into individual safety programs, according to all legal and regulatory applicable procedures. Smart International gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the user shall determine the quality and suitability of the product. Smart International expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

**⚠ WARNING:** This Filament - when used in the operation of 3D Printers or 3D Pens - can expose you and others in the same room to styrene, a chemical known to the State of California to cause cancer. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). **ALWAYS OPERATE THIS PRODUCT IN A WELL-VENTILATED AREA.**