



## TECHNICAL DATA SHEET

### FILAFLEX SEBS

#### Description

Filaflex SEBS by Recreus is a rubber-based 3D printing filament characterized by combining the flexibility and durability of the Filaflex range with other properties such as insulation, impermeability or chemical resistance, achieving a magnificent final finish of the part and a filament of great technical and industrial applicability.

Physical Property	Value	Unit	Test method according to
Material density	0,906	g/cm <sup>3</sup>	ISO 1183
	905,000	kg/m <sup>3</sup>	ISO 1183
Melt flow rate (230°C/2,16kg)		g/10min	ISO 1133

Mechanical Property	Value	Unit	Test method according to
Hardness	90A	shore A	DIN ISO 7619-1 (3s)
Tensile modulus (Young)	83	MPa	ISO 527
Elongation at break	146,00	%	DIN 53504-S2
Stress at 100% elongation	7,20	%	DIN 53504-S2
Stress at 300% elongation	11,8	%	DIN 53504-S2
Tear strength	73,5	N/mm	ISO 34-1
Abrasion resistant	230,0	mm <sup>3</sup>	ISO 4649
Notched impact strength (Charpy)n at +23°C	58,00	kJ/m <sup>2</sup>	ISO 179
Tensile notched impact strength, +23°C	42,00	kJ/m <sup>2</sup>	ISO 8256/1

Thermal Property	Value	Unit	Test method according to
Glass Transition Temperature 10°C/min		°C	ISO 11357-1/-2
VST Vicat Softening Temperature	35,0	°C	Método Vicat A: 10 Nw, 120°C/h
HDT (0,45MPa)	63,0	°C	ISO 75-2



<b>Printing Properties</b>	<b>Recommended</b>
Printing temperatures	200-245°C
Printing speed	30-60mm/s
Hot-bed temperature	50°C
Optimal layer height	0,2 mm
Minimal nozzle	0,4 mm - 0,6 mm (recommended)
Retractions	2-3 mm (speed 40mm/s)
Cooling	0%

## Adhesion to the bed.

It is essential to use bed fixation. The lacquer does not work for temperatures above 50°C. The lacquer must be applied generously on the bed to prevent the piece from peeling off.

Use a brim at least twice as wide as usual to ensure adhesion of the first layer.

Reduce the height of the initial layer and use a printing temperature 20°C higher than the printing temperature and adjust the printing speed.

Increase the line width percentage of the initial layer, the nozzle has to extrude more material and that material has to flow more outwards. this causes the nozzle to press more material onto the printing plate, which increases the adhesion between the filament and the printing plate.