

**TECHNICAL DATA SHEET**

**FILAFLEX 60A 'PRO'**

**Description**

Filaflex is a Thermoplastic Polyether-Polyurethane elastomer with additives that allow high printability in FDM printers. Filaflex® has a remarkable hydrolysis resistance, high resistance to bacteria and low temperature flexibility properties in printed parts.

<b>Physical Property</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
Material density	1,070	g/cm <sup>3</sup>	ISO 1183
	1070,000	kg/m <sup>3</sup>	ISO 1183
Melt flow rate (230°C/2,16kg)	0,000	g/10min	ISO 1133

<b>Mechanical Property</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
Hardness	63,00	shore A	DIN ISO 7619-1 (3s)
Tensile strength	26	MPa	DIN 53504-S2
Elongation at break	950,00	%	DIN 53504-S2
Stress at 20% elongation	1,00	MPa	DIN 53504-S2
Stress at 100% elongation	2,50	MPa	DIN 53504-S2
Stress at 300% elongation	4,50	MPa	DIN 53504-S2
Tear strength	40,00	N/mm	ISO 34-1
Abrasion resistant	45,00	mm <sup>3</sup>	ISO 4649
Compression set 23°C/72 hours	40,00	%	ISO 815
Compression set 70°C/24 hours	25,00	%	ISO 815

<b>Thermal Property</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
Glass Transition Temperature 10°C/min	-54	°C	ISO 11357-1/-2
VST Vicat Softening Temperature	70	°C	Método Vicat A: 10 Nw, 120°C/h

<b>Printing Properties</b>	<b>Recommended</b>
Printing temperatures	215-235°C
Printing speed	20-30 mm/s
Hot-bed temperature	21°C
Optimal layer height	0,2 mm
Minimal nozzle	0,4 mm or higher
Retractions	3,5-6,5 mm (speed 20 - 160mm/s)