

## PVA

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### Description

PVA (Polyvinyl alcohol) is a water soluble polymer, ideal to work as support material for multi-material 3D Printing.

Optimized for the FFF manufacturing process, our PVA works seamlessly with PLA, TPU, PET-G and Nylon, becoming a reliable universal support material to print complex geometries, large overhangs or intricate cavities.

### Properties

- Improved thermal stability to avoid jamming and degradation issues
- Less sensitive to ambient moisture, increasing durability
- As easy to dissolve as immersing it into tap water
- Biodegradable

### Recommendations

Make sure PVA is dry before printing. Place it in an oven or in a dehydrator at 70°C for 6 to 8 hours. After drying, store it in an airtight container with desiccant.

PVA emits low levels of gasses and particles when printed. We recommend printing it in a well-ventilated area.

Use an ultrasonic cleaner for a faster support dissolution.



**PVA - Technical information including:**

Mechanical properties		
	Typical value <sup>T</sup>	est method
MFR 220°C	2.3 gr/10 min	-
E-Modulus	3500 MpaI	SO 527
Impact strength-Charpy method 23 °C	1.7 kJ/m <sup>2</sup>	ISO 179

Filament specifications	
Diameter	Ø 2.85 mm
Max roundness deviation	≥ 95%
Net filament weight	500 g
Specific gravity (ASTM D1505)	1.22 g/cc

Thermal properties		
	Typical value <sup>T</sup>	est method
Melting temp.1	63 °C	-
Vicat softening temp.6	0.2 °C	ISO 306

Printing settings	
Extruder temperature <sup>2</sup>	10 °C - 230 °C
Bed temperature	65 °C
Speed	20-30 mm/s
Retraction speed	40 mm/s
Retraction distance	4 mm
Cooling fan Y	es
Minimum layer height	0.05 mm