

# Ultimaker PVA

## Technical data sheet

### General overview

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<b>Chemical composition</b>	Polyvinyl alcohol - see Ultimaker PVA safety data sheet
<b>Description</b>	PVA (polyvinyl alcohol) is a water soluble support material for dual extrusion 3D printing. With a good thermal stability, Ultimaker PVA is ideal for printing complex models that require supports for large overhangs, deep internal cavities, and intricate geometries. Designed for a seamless 3D printing experience, Ultimaker PVA provides good adhesion to a variety of materials - check our support website for the latest compatibility overview.
<b>Key features</b>	Good thermal stability resulting in better degradation resistance compared to other PVA filaments; less moisture sensitive than other PVA filaments; great adhesion to PLA, PETG and Nylon-based filaments; biodegradable in natural fresh water (no harmful chemicals required); biodegradable with no hazardous by-products
<b>Applications</b>	Reliable 3D printing of water soluble support structures for PLA, PETG and Nylon build materials. PVA molds
<b>Non-suitable for</b>	Reliable 3D printing of water soluble support structures for Ultimaker ABS, CPE+, PC, and PP.

### Filament specifications

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	<b>Method (standard)</b>	<b>Value</b>
<b>Diameter</b>	-	2.85 ± 0.10 mm
<b>Max roundness deviation</b>	-	0.10 mm
<b>Net filament weight</b>	-	350 g / 750 g
<b>Filament length</b>	-	~ 45 m / ~ 96 m

### Color information

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<b>Color</b>	<b>Color code</b>
PVA Natural	N/A



## Thermal properties

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	Test Method	Typical value
Melt mass-flow rate (MFR)	ISO 1133 (190 °C, 2.16 kg)	17-21 g / 10 min
Heat deflection (HDT) at 0.455 MPa*ISO 75-2 / B		-
Vicat softening temperature*	ISO 306 / A120	-
Glass transition	ISO 11357 (DSC, 10 °C / min)	58.4 °C
Melting temperature	ISO 11357 (DSC, 10 °C / min)	175.4 °C

## Other properties

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Specific gravity	ASTM D1505	1.23 g / cm <sup>3</sup>
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