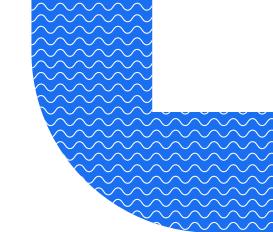
#### **Ultimaker**

# Ultimaker PVA

# Technical data sheet



#### General overview

**Chemical composition** Polyvinyl alcohol - see Ultimaker PVA safety data sheet

**Description** 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.

**Key features** 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

**Applications** Reliable 3D printing of water soluble support structures for PLA, PETG

and Nylon build materials. PVA molds

Non-suitable for Reliable 3D printing of water soluble support structures for Ultimaker

ABS, CPE+, PC, and PP.

## Filament specifications

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

#### **Color information**

Color Code
PVA Natural N/A

## Thermal properties

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

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

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