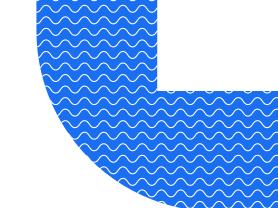
Ultimaker



Ultimaker PVATechnical 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) –	Value 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 codePVA 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 / cm³

Disclaimer

Any technical information or assistance provided herein is given and accepted at your risk, and neither Ultimaker nor its affiliates make any warranty relating to it or because of it. Neither Ultimaker nor its affiliates shall be responsible for the use of this information, or of any product, method or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability or fitness of any product; and nothing herein waives any of Ultimaker's conditions of sale. Specifications are subject to change without notice.

Version v5.00

Date April 29, 2022