

# BVOH

BVOH is a unique material specially developed for FDM printers with a very high bonding to various build materials such as **ABS, ASA, PLA, PET, PA, PC and TPU**. BVOH dissolves quickly in water (quicker than PVA) and easy to print. It gives the opportunity to print complex models in high quality. Therefore it is an excellent supporting material for dual extruder 3D printing. This Butenediol Vinyl Alcohol Co-polymer based filament is nontoxic.

## Material features:

- Good bonding to various build materials such as: ABS, ASA, PLA, PET, PA, PC and TPU
- Excellent water solubility. Higher solubility than PVA
- Easy to print at low temperature
- Helps you by printing specific, complex models
- Light- and UV-sensitive
- Waste can be disposed with household effluent (\*)



## Colours:

BVOH is available in its natural colour.

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## Packaging:

BVOH is available in nearly any type of packaging and labelling, but will be supplied always in a vacuum bag, due to the moisture sensitivity of BVOH. Ask our team to help you customizing your product.

## Filament specs.

Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

## Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,14 g/cc
MFI 190°C/21,6kg	ISO 1133	6-9 gr/10 min
Printing temp.	DF	220±10°C
Melting temp.	DSC	176°C
Vicat softening temp.	ISO 306	63,1°C

## Additional info:

Recommended temperature for heated bed is >60°C. Do not exceed a printing temperature of 230°C for a prolonged period. BVOH works with most of the common adhesives. The speed at which the product dissolves in water is dependent on the volume of the printed object, the amount and the temperature of the water. Higher water temperature (up to 70°C is no problem) will accelerate the dissolution. Keep in account that the temperature of the water is based on the properties of the material that you are printing with BVOH to avoid warping issues (example, if you print PLA with BVOH, keep the water around 40°C).

BVOH can be used on most Dual printing desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly. If you remove the spool out of the vacuum bag packaging and you do not store it in a room with low moisture content, we advise you to properly dry the material before printing to avoid any quality issue.

To sufficiently control the environmental risks derived from use of the product, an example of recommended methods of using the product is shown below.

- If the product is discharged in a household drain in the form of aqueous solution, make sure that the concentration in the water environment at the discharging point is below 1 mg/L.
- Dispose of the product after diluting it with at least 20-fold water.
- The rough indication of the maximum amount of the product disposable as aqueous solution is 2 kg/day.