

PVA-M

PVA-M filament is our preferred, cold water soluble, supporting material for dual extruder 3D printing. The modification on the raw material results in a filament that is much more thermally stable than a regular PVA. It also bonds well to PLA, ABS and PET-G, which enlarges the application field significantly. This polyvinyl alcohol-based filament is non toxic and biodegradable once dissolved in water. Easy printing, much less failures and easy removability makes this the supporting material you should try.

Features:

- Improved formula with enhanced stability in printing
- Excellent water solubility
- Thermally much more stable than a regular PVA
- Good bonding to PLA, PET-G and ABS
- Biodegradable when dissolved in water



Colours:

PVA-M is available in its natural colour. For specific applications PVA-M is available in colours on request.

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Packaging:

PVA-M 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 PVA. Ask our team to help you customizing your product.

Additional info:

Recommended temperature for heated bed is $\pm 35-60^{\circ}\text{C}$. Do not exceed a printing temperature of 225°C , because then PVA crystallizes quickly and it will no longer flow and/or dissolve in water. .

The speed at which the product dissolves in water is dependent on the volume of the printed object and the temperature of the water. PVA-M dissolves in cold water. Higher water temperature (up to 70°C is no problem) will accelerate the dissolution.

PVA-M can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry ($15-25^{\circ}\text{C}$) and away from UV light. This enhances the shelf life significantly.

Dimensions

Size	Ø tolerance	Roundness
1,75mm	$\pm 0,05\text{mm}$	$\geq 95\%$
2,85mm	$\pm 0,10\text{mm}$	$\geq 95\%$

Physical properties

Description	Testmethod	Typical value
Specific gravity	ASTM D1505	1,22 g/cc
MFR 220°C	-	2,3 g/10 min
Tensile strength	-	-
Strain at break	-	-
Tensile modulus (1mm/min)	ISO 527	3500 Mpa
Impact strength Charpy method 23°C	ISO 179	Notched 1,7 KJ/m ²

Thermal properties

Description	Testmethod	Typical value
printing temp.	-	$180-205^{\circ}\text{C}$
melting temp.	-	163°C
vicat softening temp.	ISO 306	$60,2^{\circ}\text{C}$