

# PVA-M (COD.: PVAM)

PVA-M filament is quickly soluble in water, bonds well to plastics and prints easy. Therefore it is an excellent supporting material for dual extruder 3D printing. This polyvinyl alcohol-based filament is non toxic and biodegradable once dissolved in water. For applications other then supporting material PVA-M is also available in colors and has a high tensile strength.

## Features:

- Excellent water solubility;
- Easy to print at low temperature:
- Good bonding to various plastics such as PLA & ABS;
- Biodegradable when dissolved in water;
- Limited smell.



#### Dimensions

Size	Ø Tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%

#### **Physical Properties**

Description	Test Method	Typical Value
Specific Gravity	ASTM D1505	1,23 g/cc
MFR 190°C/21,6kg	-	14-20 gr/10 min.
Tensile Strength	ISO 527	78 Mpa
Strain at Break	ISO 527	9,90%
Tensile Modulus (1mm/min.)	ISO 527	3860 Mpa
Impact Strength Charpy Method 23°C	ISO 179	Notched 1,6 KJ/m²

## **Thermal Properties**

Description	Test Method	Typical Value
Printing Temperature	-	180-205°C
Melting Temperature	ISO 294	163°C
Vicat Softening Temp.	ISO 306	60,2°C

Colours: <mark>K03016</mark> Natural

## Additional info:

Recommended temperature for heated bed is  $\pm$  35-60°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 a 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°C) and away from UV light. This enhances the shelf life significantly.

## **KLEVERFIL®**

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