

# PVA-S

PVA-S is our specially developed water-soluble solution for dual extrusion when you need to print with styrene-based materials. PVA-S has an excellent adherence to ABS, ABS-X, ASA-X and TPU98A. PVA-S dissolves slightly slower than regular PVA and it is advised to dissolve in lukewarm water, preferably in circulated water. PVA-S can handle higher nozzle temperatures (<250°C) without the risk of cross linking and clogging the nozzle and is therefore perfect for printing with styrene-based materials which typically print at higher temperatures.

## Material features:

- Great adhesion to styrene-based materials
- Stable at higher nozzle temperatures (<250°C)
- Good dissolvability in lukewarm water
- Dissolved in water
- Performs in heated environments up to 55-60 °C
- Waste can be disposed with household effluent (\*)



## Colours:

PVA-S is available from stock in its natural color.

## Packaging:

PVA-S will always be supplied in a vacuum bag.

## 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        | 1,18 g/cc     |
| MFI 190°C / 21,6kg | ISO 1133        | 58 g/10min    |
| Printing temp.     | Internal method | 240±10°C      |

## Additional info:

Recommended temperature for heated bed is ≥60°C. Do not exceed a printing temperature of 260°C for a prolonged period. PVA-S 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 PVA-S to avoid warping issues. PVA-S 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.

(\*)This material is not fully biodegradable but can be disposed of through the household drain with an excess of water.

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