

## Raise3D Premium PVA Technical Data Sheet

Raise3D Premium PVA is a water dissolvable support for PLA, TPU, PVB and Nylon based filaments from our portfolio. It is specifically engineered to have a perfect interface with these materials while also displaying good solubility.

### Physical Properties<sup>1</sup>

Property	Testing Method	Typical Value
Density (g/cm <sup>3</sup> at 21.5 °C)	ASTM D792 (ISO 1183, GB/T 1033)	1.37
Melt index (g/10 min)	210 °C, 2.16 kg	7.8

Note:

1. Tested with 3D printed specimen of 100% infill.

### Material Compatibility

Material	Adhesion
PLA	++
PETG	+
ABS	--
PC	--
PVB	++
TPU	++
Nylon	++

Note:

++ support the model very well

+ generally support the model depending on its geometry

- generally doesn't support the model depending on its geometry

-- do not support the model



## Recommended Printing Conditions<sup>1</sup>

Parameter	Recommended Setting
Nozzle temperature (°C)	215 - 225
Build Surface material	BuildTak®, Blue Tape
Build surface treatment	None
Build plate temperature (°C)	25 - 60
Cooling fan	Turned on
Printing speed (mm/s)	30-40
Raft separation distance (mm)	0
Retraction distance (mm)	1
Retraction speed (mm/s)	20
Recommended environmental temperature	Room temperature

**Note:**

Based on 0.4 mm nozzle and ideaMaker slicing software. Printing conditions may vary with different nozzle diameters.

It is highly recommended to use the PolyBox™ when printing with Raise3D Premium PVA and to store it in the resealable bag.

## Disclaimer

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End- use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Raise3D materials for the intended application. Raise3D makes no warranty of any kind, unless announced separately, to the fitness for any use or application. Raise3D shall not be made liable for any damage, injury or loss induced from the use of Raise3D materials in any application.

