

## ICE FILAMENTS PVA PRODUCT CARD

ICE Filaments PVA 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 supporting material a must try.

### FEATURES:

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



### COLOURS:

ICE Filaments PVA is available from stock in a variety of colors. Other colors on request.



FILAMENT SPECS		
Size	Ø tolerance	Roundness
1.75mm	± 0,05mm	≥ 95%
2.85mm	± 0,10mm	≥ 95%

MATERIAL PROPERTIES		
Description	Testmethod	Typical value
Specific Gravity	ASTM D1505	1,22 g/cc
MFR 220°C	-	2,3 gr/10 min
E-Modulus	ISO 527	3500 Mpa
Impact strength – Charpy method 23°C	ISO 179	1,7 kJ/m <sup>2</sup>
Printing temperature	ICE FILAMENTS	190 – 215°C
Melting temperature	-	163°C
Vicat softening temperature	ISO 306	60,2°C

### ADDITIONAL INFO:

Recommended temperature for heated bed is ± 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. ICE Filaments PVA dissolves in cold water. Higher water temperature (up to 70°C is no problem) will accelerate the dissolution.

ICE Filaments PVA 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.