

PVA (POLYVINYL ALCOHOL) FILAMENT

END USE

PVA is an abbreviation for polyvinyl alcohol, a water-soluble material. It is often used with multi-extruder FDM 3D printers as a support material. The biggest advantage of PVA filament is its ability to dissolve in water. This means there are no ugly marks left on the print after the support material is removed.

PHYSICAL PROPERTIES

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| Product Code(s) | PVA-NAT-500 |
| Colour(s) | Water Soluble Support Filament |
| Specific Gravity (g/cm ³) | 1.15 (Test Standard - ASTM D792) |
| Shrinkage (%) | 0.30 - 0.50 - flow (3.18 mm) (Test Standard - ASTM D955) |
| Tensile Modulus (MPa) | 4480 (Test Standard - ASTM D638) |
| Tensile Yield Strength (MPa) | 75.8 (Test Standard - ASTM D638) |
| Tensile Elongation (%) | 3.0 - 4.0 (Test Standard - ASTM D638) |
| Flexural Modulus (MPa) | 3790 (Test Standard - ASTM D790) |
| Flexural Strength (MPa) | 110 (Test Standard - ASTM D790) |
| Cantilever Beam Notched Impact Strength (3.18mm) (J/m) | 91 (Test Standard - ASTM D256) |
| Without Notched Cantilever Beam Impact Strength (3.18mm) (J/m) | 610 (Test Standard - ASTM D4812) |

APPLICATION

Water soluble support material.

PRINTER SETTINGS

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|---------------------------|------------------------------|------------------------|
| Spool Net Weight: 0.5kg | Print Temperature: 190-220°C | Bed Temperature: 100°C |
| Diameter: 1.75mm ± 0.05mm | Print Speed: 30-45mm/s | Move Speed: 20-40mm/s |