



Suited for Advanced Users

# Natural PVA by eSUN

## 3 mm , 500g reel

Print intricate designs with overhangs, internal structures and other difficult geometries that you have not been able to print before. Once printed, our water-soluble filament will dissolve away after soaking, leaving your model clean, and intact with very little clean up.

## PRODUCT ALERT (3)

## Disposal Notice

The preferred method of disposal for polyvinyl alcohol (PVA) support material is in the trash. The immersion of 3D printed objects into water containing support material will generate wastewater containing PVA. When PVA-based support material cannot be physically removed from the object, requiring that the object be immersed in water, it is suggested that you contact your local Sanitary Sewer (Wastewater) Authority to obtain the proper disposal method prior to discharging to the sewer.

## Usage Alert:

Since PVA filament dissolves in water it may not be suitable for most parts. The filament must be stored with a drying agent, since it will absorb moisture out of the air.

**Extrusion Temperature Limit:** 

Do not use PVA filament at hot end temperatures over 200°C as the material can potentially crystallize/carbonize, leading to extrusion difficulties.

Works with: LulzBot TAZ Dual Extruder, LulzBot TAZ FlexyDually

### **Features**

Great for interior cavities and intricate parts that make removing support by hand difficult. PVA filament is mildly flexible at room temperature, making support material removal easier. When 3D printed it leaves no residue on the bottom surface of the part.

Our Natural PVA filament extrudes well through either a standard Greg's Wade style extruder or a Flexystruder, and tends to ooze. It sticks well to painters tape, and less well to PET. We recommend using painters tape and printing with 2-3 layers of raft if you're using PVA as a support material.

When used as support material with a Dual Extruder you do not need to use a specific slicing profile. A slicing profile is available that can be used for printing entire models out of our water-soluble PVA filament.

## **Parts & Specifications**

#### Filament Specifications

Filament Diameter: 3 mm (0.12 inches)

Amount of Filament: 500g (1.1 lbs)

Filament color may vary

#### **Printing Specifications**

Special Tool Head Requirements: Dual Extruder Tool Head recommended

Hot End Temperature Range: 185°C-190°C

Do not use PVA filament at hot end temperatures over 200°C as the material can potentially crystallize/carbonize, leading to extrusion difficulties.

Print Surface: Applying a glue stick (such as Elmer's® brand) directly to the print surface before starting your LulzBot 3D printer is strongly recommended for increased printed object adhesion.

#### **Packaging Information**

PVA filament ships vacuum sealed and mounted on a reel.

#### Storage Specifications

Store your filament in an air tight container. The use of desiccant is encouraged as PVA filament will absorb moisture from the air.