



# BVOH

## WATER SOLUBLE SUPPORT

MADE FOR

bigrep **ONE**bigrep **PRO**bigrep **STUDIO**COMPATIBLE  
**FFF 3D PRINTERS**

BigRep's BVOH support material is a water-soluble filament that drastically **reduces post-processing** for 3D printed parts. Created for use with dual-extruder printers, BigRep BVOH is compatible with a **wide range of materials** to provide efficient support during the printing process. BVOH is ideal when 3D printing **complex geometries** where breakaway support be difficult to remove or impossible to access after printing. When the surface appearance of your part is paramount, BigRep BVOH results in **better surface quality** with less postprocessing effort.

BVOH **easily dissolves in water**, cleanly freeing parts from support structures without manual post-processing. While the dissolving time depends on part geometry and slicing settings, BVOH's solubility increases with higher water temperature and delivers faster results.



Water Soluble for  
Easy Removal



Saves Time  
Postprocessing



Nontoxic and  
Odorless



Excellent Support  
Adhesion



Compatible with Many  
BigRep Materials



PHYSICAL PROPERTIES	TEST METHOD	VALUE
Density	ISO 1183	1.14 g/cm <sup>3</sup>
Filament Diameter	-	2.85 mm +/- 0.05
Color Availability	-	Natural
Filament Net Weight	-	0.75, 2.5, 4.5 kg (8.0 kg on request)
MECHANICAL PROPERTIES	TEST METHOD	VALUE
Tensile Strength	ISO 527	34 MPa
Tensile Modulus	ISO 527	2400 MPa
Elongation at Break	ISO 527	9%
Flexural Strength	ISO 178	50 MPa
Flexural Modulus	ISO 178	2200 MPa
THERMAL PROPERTIES	TEST METHOD	VALUE
Vicat Softening Temperature	ISO 306	90 °C
Glass Transition Temperature (T <sub>g</sub> )	DSC	68 °C
Melting Temperature (T <sub>m</sub> )	DSC	175 °C

PROPERTIES	RECOMMENDED USAGE
Nozzle Temperature	190 - 210 °C
Bed Temperature	>60 °C
Printer Compatibility	BigRep ONE, BigRep PRO, BigRep STUDIO G2
Fan Speed	0 - 30%
Surface Adhesion	<ul style="list-style-type: none"> <li>Kapton (additional adhesion using glue, e.g. Magigoo)</li> </ul>
Drying	BVOH is highly hygroscopic. Recommended drying at 60 °C for 4 - 6 hours.
Storage and Shelf Life	Keep dry, avoid sunlight, and store at room temperature. Use BigRep SHIELD for best results. When stored properly, product has a shelf life of 12 months.
Handling	Use the BigRep Keep-Dry Box for best material printability. Protect from moisture and keep unused filament tightly closed.
Post-Processing	Wear gloves to avoid possible microdamage to skin. Use a dust mask and protective glasses when processing.
Compatible BigRep Materials	<ul style="list-style-type: none"> <li>Recommended: ASA, PLX</li> <li>Conditional: PLA, PRO HT, HI-TEMP, HI-TEMP CF, TPU 98A <i>Results depend on part size and geometry.</i></li> </ul>